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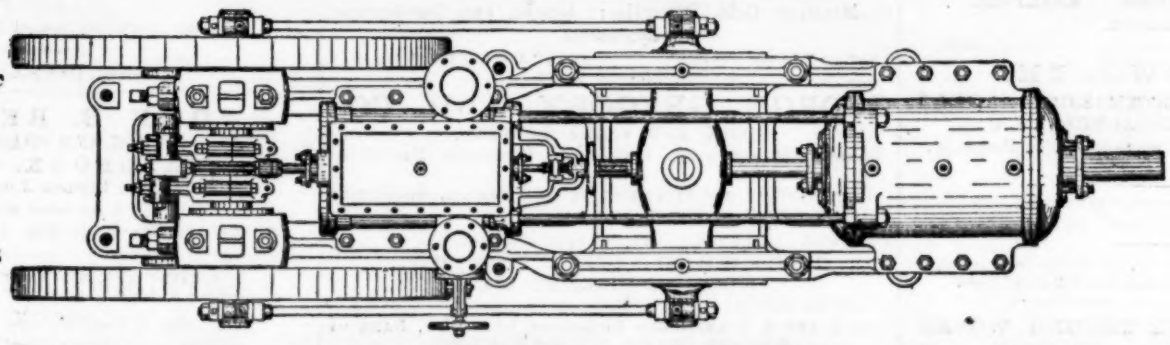

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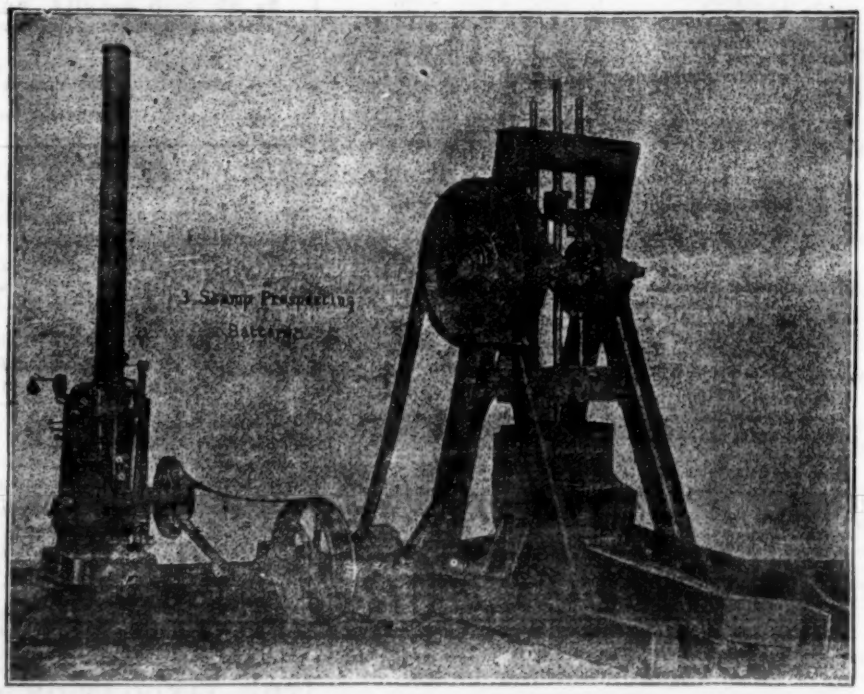

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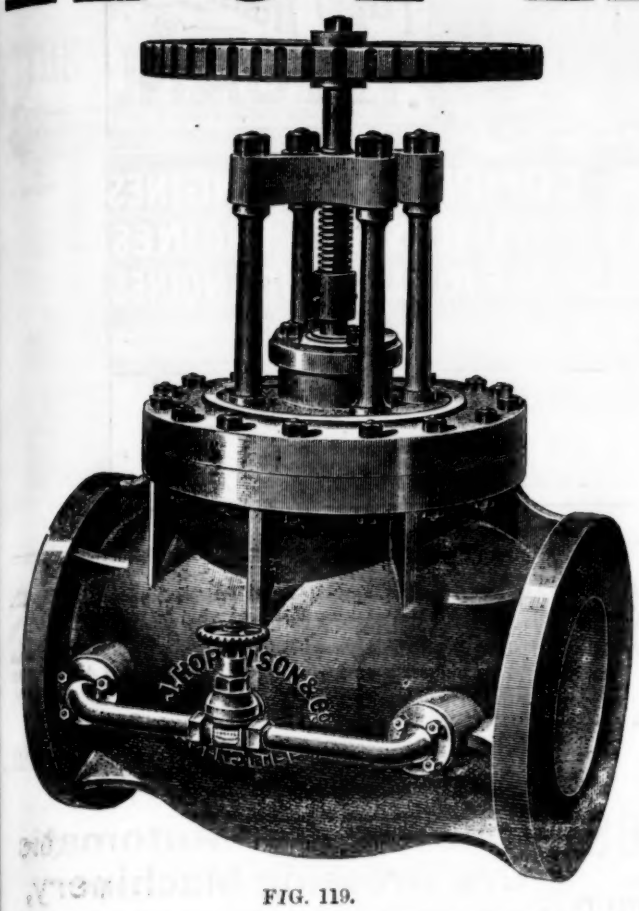

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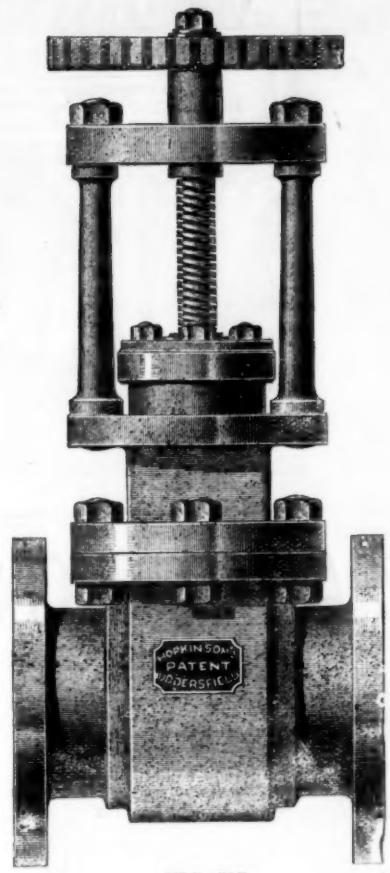

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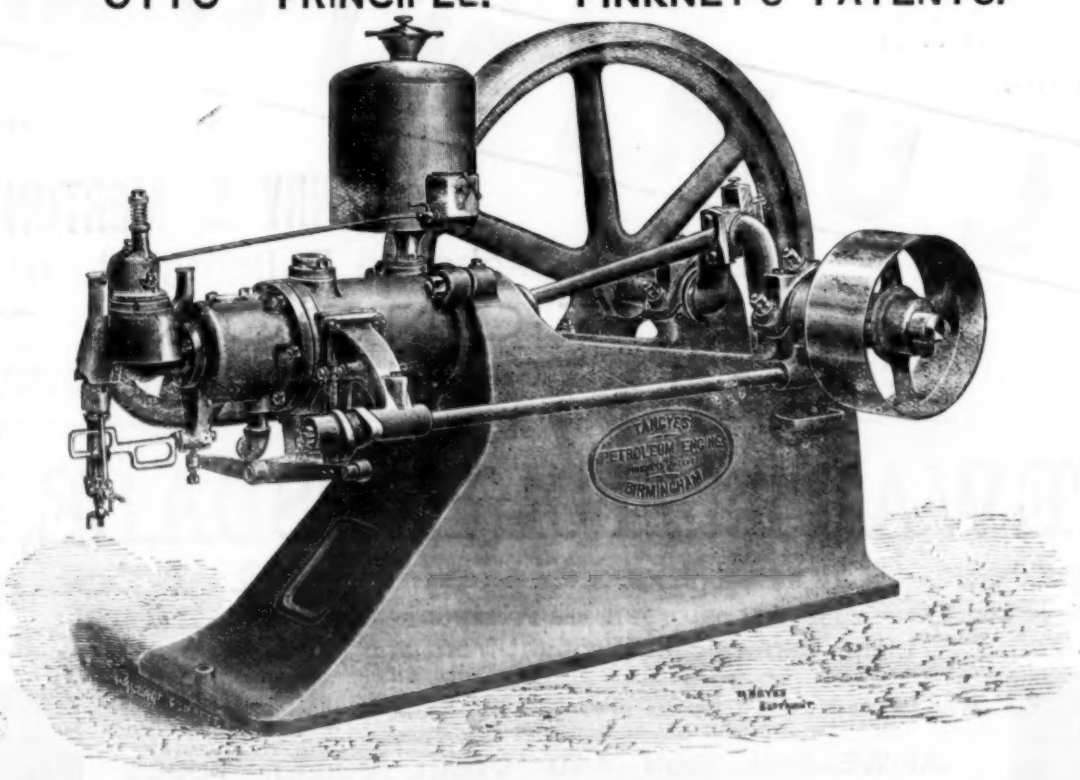

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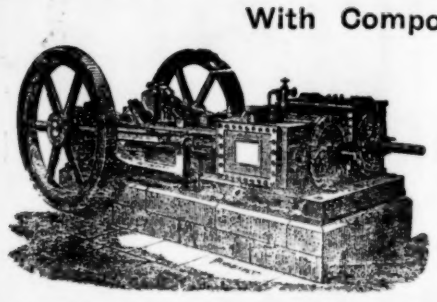

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A Special Plant, on a reduced scale, has been erected at the Works by which samples of METALLIC ORES—up to Five Tons may be treated, and the commercial value determined, in this way the most suitable arrangement of Plant is ascertained, a considerable advantage to intending Purchasers of Crushing and Concentrating Plant.

GOLD STAMP AND OTHER MILLS.

GEORGE GREEN,
THE FOUNDRY, ABERYSTWYTH.

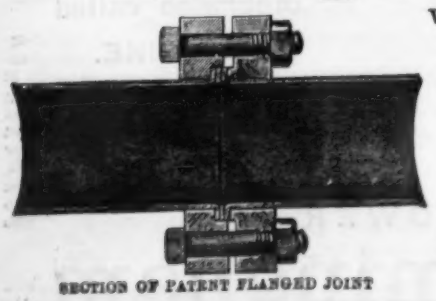
For PURE ALUMINIUM
98 to 99½ per cent. (98 per cent. minimum guaranteed) in
INGOTS, STICKS, & ROLLING SLABS;
ALSO FOR
SHEETS, &c., AND
FERRO-ALUMINIUM.

ALUMINIUM.

APPLY TO
HENRY R. MERTON & CO.,
2, Metal Exchange Buildings, Leadenhall Avenue.
LONDON, E.C.
AGENTS FOR THE BRITISH ALUMINIUM COMPANY, LIMITED.

A. & J. STEWART and CLYDESDALE, Limited.
Glasgow, Coatbridge, and Mossend.

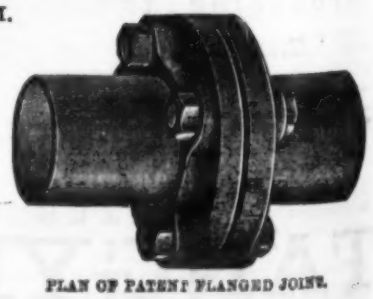
WROUGHT IRON WELDED TUBES and FITTINGS for GAS, WATER, and STEAM.
Light Lap-welded Wrought-iron and Steel Tubes
(SPECIALLY ADAPTED FOR MINES).
With Patent Flanged Joints (as illustrated) for the Conveyance of Water, Steam, and Air, at High and Low Pressures.



SECTION OF PATENT FLANGED JOINT

LAP-WELDED IRON AND STEEL BOILER TUBES
FOR LOCOMOTIVE, MARINE, AND OTHER MULTITUBULAR BOILERS.

STEEL & IRON PLATES FOR BOILERS, BRIDGES, &c.



PLAN OF PATENT FLANGED JOINT.

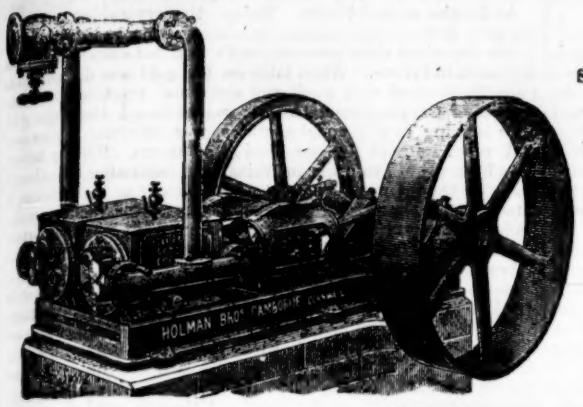
Head Offices: 41, OSWALD STREET, GLASGOW.

HOLMAN Bros., Camborne, Cornwall.

ESTABLISHED 1839.

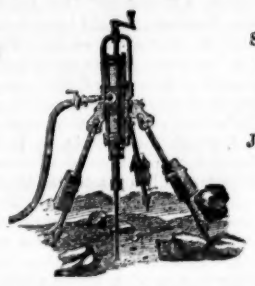
Patentees and Sole Makers of

"THE CORNISH" ROCK DRILL and "THE CORNISH" COMPRESSOR.



FIRST SILVER MEDAL, Highest Award, Mining Institute Contest, 1881.

Three Makers represented.



FIRST SILVER MEDAL Highest Award, Royal Cornwall Polytechnic Jubilee Exhibition Contest, 1882.

Five Makers represented.

AWARDED SILVER MEDAL INTERNATIONAL INVENTIONS EXHIBITION, 1885.

RECORD OF WORK DONE

At Botallack Mine, St. Just, Cornwall, **TWELVE MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** drove, sunk, and rose **288 FATHOMS** in **12 MONTHS**, equal to five times the Speed of Hand Labour.

At Wheal Grenville Mine, Camborne, Cornwall, **SIX MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** started from the **150 FATHOMS** level and put up in **EIGHT MONTHS** a **11 FEET** by **5 FEET PERPENDICULAR RISE 46 FATHOMS 5 FEET 6 INCHES**, and about midway drove **1 FATHOM 5 FT.** No communication of any kind was effected until holing to the Shaft brought down from surface.

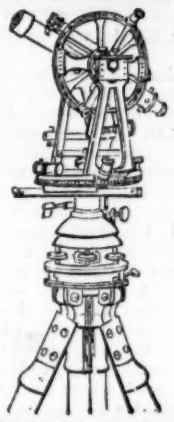
Estimates for ROCK BORING PLANT and GENERAL MINING MACHINERY on Application.

London Offices: 7 and 9, LEADENHALL BUILDINGS, E.C.

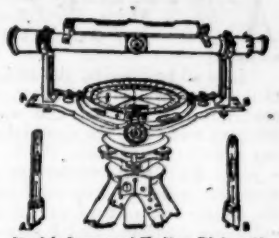
JOHN DAVIS AND SON,

ALL SAINTS WORKS, DERBY;

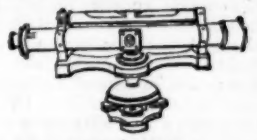
118, NEWGATE STREET, LONDON.



Transit Theodolite with Patent Hoffman Tripod Head, and Trough Compass.



Davis's Improved Hedley Dial, with Telescope and Sights Interchangeable, and Patent Hoffman Tripod Head.



Dumpy Level with Hoffman Patent Tripod Head.

MINING, SURVEYING, AND ENGINEERING INSTRUMENTS.

THEODOLITES. LEVELS. TACHEOMETERS.

Davis's Improved Hedley Miners' Dials, with HOFFMAN PATENT TRIPOD HEAD;

AND ALL DESCRIPTIONS OF MATHEMATICAL AND MINING SURVEYING INSTRUMENTS.

Revised Illustrated Catalogues Free to any Part of the World.

SECTION (A) MATHEMATICAL DEPARTMENT AND SAFETY LAMPS
SECTION (B) ELECTRICAL DEPARTMENT.

Gold Medal Awarded Mining Exhibition, 1890.

A. B. C. CABLE CODE, 4TH EDITION.

AWARDS: CRYSTAL PALACE, 1890; TASMANIA, 1891; KIMBERLEY, 1892.

CONCENTRATION.

The Clarkson-Stanfield Concentrator (Limited).

In the CLARKSON-STANFIELD process of Concentrating Refractory and Complex Ores no water is required; dust is reduced to a minimum; the loss of Mineral through water-borne Slimes is obviated.

OUTPUT ½ TO 2 TONS PER HOUR, ACCORDING TO SIZE OF MACHINE.

CONCENTRATOR TO BE SEEN IN OPERATION AT THE COMPANY'S ONLY ADDRESS

6, COLONIAL AVENUE, MINORIES, LONDON, E.

The Machine is superior to Sieves for Sizing Homogeneous Substances, such as Emery, Sand, and Powders, and may be used to great advantage in the preparation of Ochre.

N.B.—The owners of the Carndochan Mine, near Bala, North Wales, will, by arrangement, show their CLARKSON-STANFIELD plant working on a Refractory Low Grade Gold Ore.

NEW PATENTS.

LIST of APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs Rayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

19421 **Edward Reilly Stettinius**, 45, Southampton Buildings, Chancery Lane, London.—Improvements in steam boilers.—October 29.

19424 **Harry Schaffer Pell**, 45, Southampton Buildings, Chancery Lane, London.—Improvements in steam boilers.—October 29.

19417 **Elisabeth Barnston Parnell**, 323, High Holborn, London.—Improvements in or relating to the treatment of ores and apparatus therefor.—October 29.

19418 **John Crawly**, 323, High Holborn, London.—Improvements in railway or like chairs.—October 29.

19421 **Jan V. Grubinski**, 6, Lord Street, Liverpool.—Improvements in steam generators.—October 29.

19440 **Reinhard Isidore Roman**, 55, Chancery Lane, London.—Improvements in the manufacture of tubes of aluminium and its alloys.—October 29.

19443 **Leonard Pollvache**, 80, Queen Victoria Street, London.—Improvements in rotary motors and pumps.—October 29.

19470 **Frederick John Chaplin** and **Robert Chaplin**, 77, Colmore Row, Birmingham.—Improvements in and means for annealing metals.—October 30.

19477 **Henry Martyn Nicholls**, 13, Beauchamp Place, Brompton, London.—Improvements in rotary steam and other fluid engines and pumps.—October 30.

19488 **William Eaves**, 47, Lincoln's Inn Fields, London.—Improvements in or connected with steam generators.—October 30.

19502 **William Davies**, 27, Southampton Buildings, Chancery Lane, London.—Improvements in miners' safety lamps.—October 30.

19509 **Michelangelo Cattori**, 37, Chancery Lane, London.—Improvements in the construction of electric railways.—October 30.

19527 **Webster Barber**, Commercial Street, Halifax.—Improvements in steam engines.—November 1.

19561 **Robert Baird**, 11, Percy Street, Paisley Road West, Glasgow.—Improvements in steam generators.—November 1.

19709 **William Hall**, 24, Temple Row, Birmingham.—Improvements in or connected with the shaping of metals.—November 2.

SPECIFICATIONS PUBLISHED.

13515, **Little, W. G. and C. W. G.**, steam, &c., engines, 1894; 19545, **Cartwright**, furnaces, 1894; 21879, **Thwaite and Allen**, effecting electro-fusion of metals, 1894; 23070, **Robertson**, furnaces, 1894; 24318, **Bird**, steam engines, 1894; 24390, **Ackroyd and Best**, miners' safety lamps, 1894; 25298, **Nordlan**, steam engines, 1894; 6000, **Peel**, electrically lighting miners' lamps, 1894.

The above specifications published may be had of Messrs. Rayner and Co., 371, Chancery Lane, London, at 10d. each, including postage.

BOARD FOR EXAMINATIONS FOR THE MINING DISTRICT OF NEWCASTLE-UPON-TYNE.—The Secretary of State has been pleased to order the next examination of candidates for first and second class certificates of competency within the district, to be held in the City of Newcastle-upon-Tyne, in the County of Northumberland, on Thursday and Friday, the 16th and 17th days of January next, and that such examination will be held accordingly at the Durham College of Science, Barras Bridge, on those days, commencing at 10 o'clock in the morning.

THE UNITED EXPLORATION COMPANY (LIMITED).—We are informed that the offices of the company have been removed to 19, St. Swithin's Lane, E.C.

JOINT-STOCK COMPANIES.

NEW REGISTRATIONS.

THE following are among the joint-stock companies registered at Somerset House since our last notice:—

Gwern Collieries (Limited).—Registered by Rawcliffes, Rawle and Co., 1, Bedford Row, W.C. with a capital of £25,000 in £10 shares. Object: To acquire as a going concern the Gwern Collieries, situate at or near Llansamlet, Glamorganshire, and to carry on business as colliery proprietors in all its branches. The directors are to be elected at the first general meeting. Qualification 10 shares. Remuneration to be fixed by the company.

Wondalli (Deccan) Gold Mines (Limited).—This company has just been formed with a capital of £50,000 to work a gold mining property in the Hyderabad State, extending over 3174 acres, purchased from the Hyderabad Company (Limited) for £150,000, in 150,000 fully-paid shares. The capital has been privately subscribed, and the following gentlemen have accepted seats on the board: Lord Harris, late Governor of Bombay, Chairman; Lord Laurence and Mr. G. H. M. Batten, nominated by the Hyderabad-Deccan Company; Colonel Sydney Foster, and Mr. Edward Moore. The offices of the company are at Dashwood House, New Broad-street, E.C.

Waitekauri Central Gold Mine (Limited).—Registered November 7, by Greville and White, 20, Haymarket, S.W. Capital £65,000, in 10s. shares. Objects: To acquire, work, and develop the Gold Mining Claim No. 33, now known as "The 22 4 Licensed Holding," in the Hauraki Gold Fields, New Zealand, but intended to be called the Waitekauri Central Gold Mines, and with a view to the above objects to adopt and carry into effect an agreement expressed to be made between J. S. Edwards of the one part and this company of the other part, and to carry on the business of a mining, milling, and smelting company in all its branches.

St. Denis Gold Mine (Limited).—Registered November 7, by Bircham and Co., 50, Old Broad Street, E.C. Capital £150,000, in £1 shares. Objects: To adopt and carry into effect an agreement between the Central Exploration and Investment Corporation (Limited) of the one part, and this company of the other part, for the acquisition of certain auriferous mining leases, to develop and turn to account the same, and to carry on the business of a mining, milling, smelting, and metallurgical company in all or any of its branches.

Eastern Rand Syndicate (Limited).—Registered November 8 by Davidson and Morris, 41 and 44, Queen Victoria Street. Capital £100,000, divided into two classes of shares—namely, 60,000 "A" shares and 40,000 "B" shares of £1 each respectively; the objects of the company being primarily the adoption of an agreement expressed to be made between the African Gold Recovery Company (Limited) of the one part, and this company of the other part; generally to seek for and secure openings for the employment of capital in South Africa or elsewhere.

Hannan's Mount Charlotte (Limited).—Registered November 8, by Vallance and Co., Lombard House, E.C., with a capital of £100,000, in £1 shares. Objects: To acquire any mines, mining rights, claims, protected areas, ores, minerals, tailings, concentrates, alluvial deposits, water rights, grants, &c., in Western Australia or elsewhere; to enter into an agreement with the Perth and Albany Syndicate (Limited) for that purpose, and to carry on the general business of a mining and smelting company.

Moanatari Gold Mining Company (Limited).—Registered November 7, by Ingle, Holmes, and Sons, 23, Threadneedle Street, E.C. Capital £200,000, in £1 shares. Objects: To adopt and carry into effect an agreement between Cooper's Australian Exploring Company (Limited), of the one part, and this company of the other part; to acquire any mines, water and other rights, grants, leases, claims, concessions, auriferous land, &c., in New Zealand or elsewhere; to develop and turn to account the same in such manner as the company shall see fit, and to carry on the general business of a mining, milling, smelting, and metallurgical company.

THE African Gold Recovery Company (Limited) announce that 54,500 ounces of gold have been recovered at the Rand, and 7000 ounces in other districts, total 61,500 ounces during October by means of their MacArthur-Forrest cyanide process. The September total was 64,000 ounces.

CONTRACTS OPEN:

FOR MINE, QUARRY, RAILWAY, AND ENGINEERING WORK, STORES, &c.

*** We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given.*

The date given is that by which tenders must be delivered, in nearly all cases further information can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

HOME CONTRACTS.

Oil Wagons, November 27 (*London, E.C.*)—For the supply and delivery of oil wagons with cylindrical tanks for the East Indian Railway Company, as per specification and drawings to be seen at the company's office. Tenders are to be sent to Mr. A. P. Dunstan, secretary, Nicholas Lane, London, E.C., marked "Tenders for Oil Wagons," not later than one p.m. on 27th inst. For each specification a fee of £1 1s is charged, which cannot under any circumstances be returned.

Ironworks, November 27 (*The Hague*).—For the supply of iron and ironwork, including the superstructure with accessories, for 39 bridges, and diverse rolling stock parts. Conditions from the Ministerie van Koloniën, The Hague.

Driving Drift (*Port Talbot*)—For driving a cross-measures drift, about 870 yards in length, at Duffryn Rhondda Colliery, near Port Talbot. Specifications to be obtained from the manager, Mr. F. S. Jacob, Cwmavon, Port Talbot.

Sinking Well. November 25 (*Chieveley Berks*).—For sinking a well at Chieveley, for the Chieveley School Board, in accordance with specifications to be seen at the Clerk's office, to whom tenders must be sent by 25th inst.

Fuel. December 2 (*Swansea*).—For the supply of coal and patent fuel for six or twelve months from January 1, for the Swansea Harbour Trust. Forms of tender and full particulars may be had on application to the Engineer, Harbour Office. Tenders by noon on December 2.

THE MONSTER NEW HOTEL IN LONDON.—The huge building erected on the Thames Embankment by the noted Liberator Company is being rapidly prepared for opening by the new owners. It is to be called the Hotel Cecil, and will be the biggest undertaking of its kind in the metropolis. Estimates for furnishing were invited a short time ago, and it can be easily understood that there has been keen competition for such an important contract. It is now announced that Messrs. Waring and Son, of 181, Oxford Street, London, W., and of Manchester and Liverpool, have succeeded in obtaining the lion's share of the order, and are to be entrusted with the furnishing and decoration of the most important part of this immense hotel.

MAN'S INGRATITUDE.—We have it on Shakespeare's authority that the winter wind is not more unkind than man's ingratitude. In many cases this is unfortunately only too true. There are times, however, when the benefit received is so great that ingratitude becomes impossible. When life is rendered a burden to us by sickness, and someone comes and restores us to health, we should be base indeed to feel ungrateful. Thus, millions are to-day grateful to Holloway's Pills and Ointment, which have cured them of all stomach and liver troubles, banished headache, flatulency, indigestion and low spirits, and cleared their systems of gout, rheumatism, sciatica, and all similar ailments.

THE RAND CONGLOMERATES.

Paper by Mr. KUNTZ.

AT the usual monthly meeting of the Geological Society of South Africa, the following paper on "The Rand Conglomerates," contributed by Mr. Kuntz, was read by the secretary:—

"Like all sediments, the schists of the so-called Cape formation are of water-worn origin, deposited during the Devonian period, near a seacoast, and were formed of the South African Primary rocks and the underlying granite. Of the rocks forming the Cape formation, the conglomerates and sandstones are a coast formation, whilst the quartzites, dolomites, and clay slates are merely a deep-sea formation. The material of which the schists are built up was broken by the water-courses of the adjoining continent and transported to the coast, where it was deposited, the pebbles and coarse sands being left near the coast, the finer sands and slimes being carried away from the coast by the current running far into the sea. As it is still to-day, so it was then. The distribution of land and water on the earth changed, perhaps even more rapidly than at present, and the coastlines were continually in a state of lowering and rising, due to the folding of the crust of the earth, owing to the contraction of the interior. On the same spot, where to-day near the coast a fine clay slate was deposited, a sandstone settled down a 1000 years afterwards, and a conglomerate after a further 1000 years, according to an advancing coastline, or *vice versa*. Thereby a change of different schists on a greater scale was produced, whilst the change of schists on a smaller scale can be explained by considering wet and dry seasons alternately. During wet seasons the rivers and streams of the adjoining continent became swollen, and the strong currents took with them pebbles and coarse sands down to the sea, whilst during the dry season these remained in the rivers, and the weak currents took with them only fine sands and slimes to the sea, which were deposited on the conglomerates and coarser sands brought down during the wet season. The extent of the area over which the sediments can be deposited is regulated by the strength of the currents in the water courses, where they are being discharged, *i.e.*, on the coastline; also by the weight and fineness of the fragments of the rocks which are being carried down. The celebrated Vienna geologist, Professor Freiherr von Richthofen, states that the distance from the coastline to the limit of such an area amounts to 400 kilometres, which is as far as from here to the southern part of Basutoland. Owing to the continued displacement of the coast line, that area might become wider to a certain extent, besides which it would appear to be still greater in consequence of the coast being not a straight, but a curved line. Respecting these circumstances, it is not surprising to find the coast formation of the Cape schists over so large an extent of country in South Africa.

What They Were Built up of

The questions of the locations and of the nature of the rocks out of the fragments of which the conglomerates and sandstones of the Cape formation were built up, have caused a good deal of discussion amongst geologists. From their fragments we are able to see that they must have been rocks rich with quartz. But there is no definite reason for assuming that they consisted of quartz exclusively, and that they are unknown on the South African continent, and are now covered by the waves of the Indian or Atlantic Ocean. In any case, they must have been older than the Devonian rocks; they must have been Silurian and Archæan, with the granitic base of these oldest sediments, whose fragments composed the Cape formation. Now the Silurian or Cambrian Swazi schists, as well as the Namaqualand, or Malmesbury beds, are rich in quartz, consisting partly of quartzites, quartzitic sandstones, and quartzitic shales. Besides, they are penetrated by a great many auriferous quartz veins. The quartz of these rocks was much better able to resist the destroying influence of the water, and was consequently converted merely into pebbles and sands, whilst the other constituent parts of the rocks, such as mica, feldspaths, pyroxene, amphibole, fine grained eruptive rocks like diabase, &c., as well as limy and clayey schists, especially amongst the far harder quartz fragments, could be worked into much finer particles during the transport down to the coast. On this account, they were deposited further away from the coast, in the deeper sea, as clay slates, shales, limestones, grauwackes, &c. In this manner a kind of concentration of the quartz along the coast line resulted, and the quartz accumulated in the coast formation of the Cape schists does not represent the fragments of a single quartz formation, but a product of a natural concentration of the quartz out of all the rocks older than the Cape schists.

How the Rocks Were Folded.

The so-called "basin theory" has been much discussed lately. In most cases the "basin" was understood to mean the seemingly basin-like formation of the schists containing the conglomerates, and it was spoken as of a northern margin of the basin at Johannesburg, and of a southern margin in the northern Free State. By others the "basin" was understood to be the Devonian sea basin, in which the sandstones and interstratified conglomerates were deposited, just as it is understood when mentioning a coal basin. It is, however, not proved that there is really a synclinal basin like formation, as the supposed parts of the margin of this basin do not form yet a closed curve. In any case, it is certain that the conglomerate beds could not have been formed in their present position, with angles of inclination up to 85°. But, as they show by their water-worn origin, they must have been deposited with a far flatter inclination, just as the youngest sediments are found still to-day. Now the question arises, through what causes and in what manner was the present position brought about? The earth is a cosmic body whose temperature is gradually cooling down. With the continued cooling, its volume is shrinking, and, as the skin of an old man's drying face folds itself, also the face of our ageing mother-earth wrinkles. In other words, the benumbed crust of the surface, formed when the earth was hotter and more capacious, gets too wide for the continually cooling and contracting interior. The mutual attraction of masses prohibits the formation of large hollow spaces, and tensions arise in the firm crust of the earth, causing it to fold, the strata breaking, sinking down, sliding over, dislocating, &c. All the mountains of the earth, as far as they are not caused by erosion exclusively, were originated by these influences, the mountain ranges directly, the volcanic mountains, usually arranged in blocks, indirectly, inasmuch as the eruptive rocks of which they consist came up through the slides and breaks caused in the manner described. Generally speaking, the older sediments will be found in a more disturbed formation than the younger ones. When afterwards the water has done its levelling work for thousands and millions of years, and has disintegrated the backs of the folds, a profile of the rocks horizontally deposited will be found on the surface.

Here, too, in South Africa, which consists mainly of the older rocks, the influence of the contraction of the earth makes itself remarkably observable. Granitic and gneissic rocks, which may pass for the first grinding crust of the earth, form everywhere the base of the sedimentary deposits. Then follow the clay-slates, shales, quartzites, quartzitic sandstones, and slates of the Primary system. The foldings which then occurred caused the Cape schists overlying the Malmesbury beds to rest unconformably, as the latter foldings caused the Karoo formation, overlying the Cape formation, to rest unconformably. Naturally these folds occupied a long space of time. Therefore, it may happen locally that a layer overlies an older layer of the same formation unconformably, as may be the case with the younger Black Reef and the older Main Reef series. That the rocks containing the conglomerates must once have been exposed to enormous pressure is proved by the crushed and deformed pebbles in the conglomerates and by other evidences observed through the microscope.

The effects of the folding.

Now, let us consider what could have been the effect of such a folding of a whole system of rocks. First, the upper layers were bent up, the underlying ones being pressed after them. At least, this happened in the case of the granitic base, which will have to be taken as plastic on a large scale. Folding up further, the upper schists broke and bared the lower ones, till the granite also was denuded, which afterwards, as between Johannesburg and Pretoria, formed the centre of a broken fold, with a symmetrically arranged profile of schists around it. Perhaps a piece of the broken roof may remain in the centre, as, for instance, in the Alps, where there are found pieces of the dolomite of the outer Alps lying upon the granites and Archæan rocks of the central Alps. It may be that the position of dolomites within the granitic centre of a broken fold in this country also can be explained in this manner. As for the dolomite occurring at the Six Mile Spruit, the explanation given by Mr. Draper seems to me to be the best one. But let me mention another point, which, perhaps, will throw some further light on this subject. Most of the folded mountains are symmetrically formed, inasmuch as the one side of the fold is steeper than the other. The Alps, for example, have their steep descent on the southern side; the Appenines, in Italy, towards the Adria, &c. In the same way the Witwatersrand fold has its steep descent towards the north. On the steep side it can easily happen that in consequence of the breaking down and slipping over of the different parts of the rocks the outcrop of the lower rock will be covered with some part of the upper one; there are several examples of it in the places mentioned. That may have occurred also in our case on the northern slope of the Witwatersrand fold. But to prove this it will necessitate carefully performed examinations and surveys. The upper portion of the fold of the rocks is now flattened by atmospheric influences, and out of the decomposed fragments of rocks younger sediments have been built up. The older a folding of this kind is the less distinctly is it observable by the surface formation, and *vice versa*. The large upheaval, whose southern margin is the Witwatersrand, reaches its culmination between Johannesburg and Pretoria approximately; wherefore the schists are dipping steeper at Johannesburg than further east and west. In the Potchefstroom and Klerksdorp districts the folding seems not to have been large enough to denude the granite, perhaps not even strong enough locally to cause an outcrop of the deeper lying reef series, in which, however, the steepness should be met with at a certain depth below the upper series, but to the same degree is another question. Besides the folding on a larger scale, there is also a folding on a smaller scale. Taking the steep-dipping schists in the Johannesburg district, it is remarkable that the change of the dip angle in the Pochefstroom and Klerksdorp districts causes sometimes a second and third outcrop of the same flatly-dipping schists. Further large upheavals, which have denuded granite base, are located east of Heidelberg and in the Northern Free State. The first one causes the outcrop of the Heidelberg reefs; the latter the outcrop of the Free State conglomerates. There are certainly other foldings producing outcrops of the Cape formation with its conglomerates. Some of them are already known; many may not have been discovered yet, or not valued owing to the deficiency of payable gold in the interstratified conglomerates.

Another Theory.

Here I may mention another theory by which some geologists explain the folding-up of schists. The temperature of the deep seas, be they located at the poles or at the equator, from the bottom up to a certain depth, has been proved to be always 4° Celsius (centigrade)—that is, about 39° Fahrenheit. With this temperature the water is tightest. Supposing that schists on schists, layers on layers, are settling down in such a deep sea basin, the bottom will get higher and higher, and the more the former bottom is covered the more the temperature will rise, about 1° Celsius with every 33 metres, or (say) 100 feet, as averaged by experiments made with many bore holes and deep shafts. Such series of sediments built up in the sea reach sometimes a considerable thickness. The thickness of only one of the different series of schists forming the outer Alps amounts, for example, to about 10,000 metres, or more than 33,000 feet. Taking the increase of temperature as 1° Celsius in every 100 feet, the difference of temperature in the same horizon being the former bottoms of the sea would be more than 330° Celsius, or about 630° Fahrenheit. An increase of temperature like that would be well qualified to cause a remarkable increase of volume of the rocks concerned, the effect of which would be a bending up of the schists. Taking the thickness of the Witwatersrand formation containing the banket beds as 10,000 feet, the building up of these schists in the sea would cause an increase of temperature of about 100° Celsius, or 208° Fahrenheit. Perhaps this circumstance influenced the bending up, too. But I think the main reason of these folds will always be looked for in the contraction of the earth.

The Gold in the Banket.

The question touching the origin of the gold in the conglomerates is a very difficult one, and has already caused a good deal of discussion, not only amongst South African geologists, but also amongst geologists of other countries. Their theories on this subject are very different, the three principal ones being as follows:—

1. The gold was deposited by some chemical precipitation from sea water simultaneously with the deposition of the conglomerates.

2. The gold was deposited simultaneously with the formation of the conglomerates, as it is the case with alluvial gold, and then subsequently dissolved and crystallised by means of percolating solutions.

3. The gold was not originally present in the conglomerates during the time of their deposition, but is of secondary origin.

Deposited Simultaneously.

As to the first theory: As it appears to-day, the water of most of the rivers and of the ocean contains traces of gold. This was the case also in the earlier geological periods, and especially in the water of the coast where the conglomerates were deposited. This may have been owing to the great quantity of auriferous quartz veins of the adjoining continent. By certain chemical actions, perhaps in consequence of the gold-containing water meeting waters containing sulphates of iron or any organic substances, the gold may have been precipitated and deposited in crystalline forms in the sediments then settling down. It is, however, peculiar that the gold should have been deposited just between the pebbles only, and not in the adjoining sandstone, or in the pebble always to a far greater extent than in the sandstones. This is strange, for these chemical actions could not have had any influence on the fineness of the sediments settling down. This fact, as well as the occurrence of rich shoots (chutes), rich and poor pebble stringers within the reef body, the influence of the dykes and faults and other appearances, shows that the occurrence of the gold cannot be explained by this theory. It is, however, quite possible that the gold in the whole Cape sandstone formation is due to precipitation of gold out of the sea-water, especially if the fine gold particles spread through the whole formation are proved to be of a crystalline nature.

Dissolved and Crystallised.

As for the second theory: Before the crystalline nature of the gold in the conglomerates was known, the supposition that it was deposited simultaneously with and between the pebbles was most in favour. When later on the gold was discovered to be in the form of very small and deformed crystals within the cement of the conglomerates, it was assumed that the gold, after settling in the conglomerates, was afterwards dissolved and reprecipitated by percolating solutions. Similar actions have been proved to occur in veins, and assuming this theory, many of the other evidences observed, such as rich shoots, in quartz veins, the presence of gold in the footwall, rich smaller leaders accompanying the reefs, enrichment in smaller parts of the reef, &c., can be explained. But the influence of faults and dykes, and the fact that gold in larger quantities is found only between the pebbles, and not in the sandstones, generally speaking, still remains unexplained. If the gold was transported with the fragments composing the conglomerates and sandstones and deposited with them simultaneously, why should the gold have settled down only between the pebbles and not in the sands, or why in the pebble layers in a far greater quantity than in the sandstones? Although gold is a much heavier body than quartz, it will settle down with far larger particles of the latter according to the law of equal fall in the resistent medium. It should also be present in the coarser sands, considering the microscopic fineness of its particles; it should be, at least, in the small sandstone bodies bedded sometimes in the richer reefs. If the gold in the conglomerates was deposited with them, it ought to be in a greater or smaller quantity in every conglomerate. But there are some, even adjoining rich reefs, which do not yield any gold, or at least not more than is found through the whole formation. Then there should also be conglomerates where the gold washed in has not yet changed, or partly so, into crystalline gold, as there are conglomerates in which no percolation of solutions has taken place. Nor can it be assumed that in all auriferous conglomerates every bit of gold has been dissolved and crystallised. Up to the present time, however, as far as I know, no gold of primary formation has been found in the conglomerates.

Of Secondary Origin.

As to the third theory: The crystalline nature of the minerals in the conglomerates, especially in the cement of them, is the most irrefutable argument for their secondary formation, whether they were originally present or not. Supposing that small hollow spaces between the pebbles remained when the conglomerates were formed, and which allowed the percolation of solutions, why, in such hollow spaces, should there not occur actions which are usual in other similar hollow spaces, for instance, in the clefts in which veins had been formed? The minerals in veins are formed in most cases by percolating solutions. This is proved by parallel actions observed within historic times. Respecting the material forming the veins, the views of geologists are not yet in accord to-day. There are, however, two theories better recognised than the others—the theory of "lateral secretion," and the theory of "ascension," as we call them in German. According to the first, all fillings of the veins originate from the adjoining rocks, and according to the second, the filling material comes from below. Microscopic and chemical examinations of the vein rocks, as well as of the adjoining rocks partly decomposed along the veins, have been carried out at Freiberg, in Saxony, and Przibram, in Bohemia, by which it has been proved that most of the minerals in the veins are contained in the undecomposed parts of the adjoining rocks too, whilst the immediaely adjoining partly-decomposed parts of the rocks are deprived of them. Considering that the percolating solutions often rise from a considerable depth, and are also percolating through rocks situated, perhaps, miles below the surface, which contain other minerals, it is quite natural to infer that these solutions may carry with them also elements of other minerals not contained in the upper attainable rocks. Thus the process of filling the veins can be explained sufficiently by both these theories, or by the "lateral secretion" alone taking it in a broader sense.

The Effect of Temperature.

Now, as the conglomerates before the formation of a water-tight cement can be taken as hollow spaces, why should not there have occurred similar actions? In that case, however, the leaching out of the adjoining rock will not have taken place from the conglomerate beds; but it may have been that the leaching process went on along the numerous slides and breaks, mostly filled with diabase, which were produced by the tilting up of the whole formation. When the hot diabase veins cooled and shrunk, they allowed of waters leaking down to a great depth. These waters, aided by their high temperature, may have accomplished the leaching process of the adjoining more or less gold-containing rocks. They then penetrated the conglomerates, where they, with their advancing cooling, lost gradually all their mineral contents, which were precipitated and deposited in crystalline forms between the pebbles. In this way especially the auriferous solutions may have lost their gold by coming in contact with the pyrites already present in the conglomerates. It is also very probable that electro-magnetic currents, considering particularly the great amount of iron in the rocks concerned, may have influenced this action to a certain degree. According to the view described, the gold in the conglomerates is to be taken as a kind of natural concentration of the gold distributed in the whole formation. Besides the gold, all the other elements of the adjoining rocks are found in crystalline forms in the cement of the conglomerates, amongst others quartz, pyrites, mica, chlorite, &c. The gold seems to be of younger origin than the quartz and the pyrites, as crystals of gold have been found surrounding crystals of quartz and of iron pyrites. The idea that the diabase veins must have had a certain influence on the amount of gold in the conglomerates has been commented upon already by many of our experienced local men. If it is true that the conglomerates in South African countries, where they are not penetrated by diabase veins, are poor, the influence of this eruptive rock on the yield of gold is proved. The influence of the veins and large faults of older origin on the immediately adjoining parts of the reefs can be explained by assuming a hindering and a facilitating respectively of the percolation caused by them locally.

Mr. Kuntz's Observations.

Here I should like to mention some observations I have made which, if they are proved to be generally correct, may throw some light on the origin of gold in the conglomerates. The conglomerates in which the pebbles are lying immediately one on another are, generally speaking, richer than those in which the pebbles are embedded in a surrounding fine-grained cement. In the first case, originally no cement, or only a little of it, was

...The solutions could penetrate more easily, and a greater percolation took place than was possible in the conglomerates in which the intervals between the pebbles already were filled by cement. In the latter case, the cement was consequently not of secondary origin, but was deposited simultaneously with the pebbles. If, however, a conglomerate in which the pebbles are surrounded with cement is rich, the amount is to a great extent of secondary origin. In that case percolating solutions may have caused hollow spaces in the cement before the auriferous solution came in, these afterwards filling up again the hollow spaces There are also conglomerates which are poor, although their pebbles are lying the one on the other. These conglomerates change their structure within a very short distance, in some cases change into sandstone altogether. Here the penetration of the loose parts of the conglomerates by the solutions was prohibited or hindered by the tight parts. It seems, therefore, probable that every rich reef must have some extent in the striking or dipping direction. All these evidences, especially those under the second and third theories, point to the fact that the gold for the most part is not an original element of the conglomerates, but of secondary origin, deposited by percolating solutions.

I expressly mention that the statements last made can be based only on a few observations, and that the purpose of mentioning them is merely to draw attention to the structure of the conglomerates, especially the attention of those geologists who are in the position to carry out such examinations.

On its conclusion the paper was received with applause.

The PRESIDENT, in the name of the society, thanked Mr. Kuntz very heartily for his able paper. There had been many theories as to the deposition of the gold in the conglomerate, and the temptation was still to ask, as with the fly in amber, "How the devil did it get there?" They were, as in that case, confronted with the actual case, and he hoped that the paper would do somewhat towards solving the question.

REVIEW.

Elements of Mineralogy, Crystallography, and Blowpipe Analysis from a Practical Standpoint. By Alfred J. Moses, E.M., Ph. D., and Charles Lathrop Parsons, B.S. (New York: D. Van Nostrand Company; London: Kegan Paul, Trench, Trübner and Co., Limited.)

There is no scarcity nowadays of works on mineralogy, and the closely-allied science of crystallography, but we cannot remember to have come across one for some time so well suited as the little work before us to the requirements of the practical mining engineer and geologist. As stated by the authors themselves, their object has been to supply clear and concise answers to the questions what a mineral is, what uses it has, how it is recognised, or if not recognisable, how it can be determined by simple and rapid tests? This is the task they have set themselves to perform, and they have done it well. Of course, so vast a subject cannot be treated in all its complexity of minute detail within the 340 pages of which this book consists, and it was, therefore, a sensible idea to limit the descriptive portion to some 250 of the more commonly-occurring minerals. We are far from saying that the work is perfect; it has, above all, *les défauts de ses qualités*. The degree of conciseness here aimed at has naturally led to a certain degree of obscurity, which is especially noticeable in the chapters on crystallography. These are based on the most modern conceptions, and are in so far very satisfactory to those who already know something of the subject, but we fear that a beginner would hardly derive very clear notions from them. We find, for instance, that no one ignorant of crystallography would be greatly enlightened by the paragraphs on the various forms of crystallographic notation. On the other hand we consider the plan here adopted of employing representations of the crystallographic axes of actual minerals in the various figures, to be a very good one. The authors are weakest, perhaps, in their definitions; for instance, the definition of minerals on page 121 decidedly faulty, inasmuch as all minerals are not compounds; moreover, minerals, in addition to a definite chemical composition, possess definite physical characteristics. Strangely enough the authors omit all account of the latter, the optical, electrical, and magnetic properties of minerals not even being referred to in the chapter on the characters of minerals. Again, the sentence on page 129 "minerals are distinguished from rocks by something of regularity in their chemical structure," can hardly be accepted as in any way a satisfactory statement of the distinction between these two classes.

The chemical part of the work is good, although it, too, assumes a certain amount of previous knowledge, whilst the illustrations are merely poor reproductions of figures that have already done duty in various works on blow-pipe analysis.

It may be proper to mention the general scheme of the book, which is as follows:—

Part I.—Crystallography.
Part II.—Blow-pipe analysis.
Part III.—Descriptive mineralogy.
Part IV.—Determinative mineralogy.

We have already dealt with the first two parts. With respect to the third, we need only say that the authors have attempted no scientific classification at all. They commence with the heavy metals, grouping the ores of each metal together, a system which, if it has the disadvantage of separating such natural groups as are formed by galena, argentite, &c., or by siderite, rhodocrosite, &c., has, on the other hand, distinct advantages for the practical man who studies more the economic than the scientific side of mineralogy. The silicates are very briefly dealt with, and are arranged in the order employed by Dana, in his "System of Mineralogy."

Part IV. consists of a series of tables for the rapid determination of the common minerals. If applied with care and judgment these tables will be found very useful, although there is always the danger that an observer coming across a rare mineral not included in the tables might be greatly misled as to its real character.

There are a few mistakes in the book, though none of any great moment, and, taken as a whole, we can cordially recommend it to mining engineers and others who require a brief handy book of reference that shall include only the more commonly occurring minerals, and that shall give them the amount of information which they require about these unobscured by a mass of detail that concerns only the specialist in the science.

NEW SOUTH WALES RAILWAYS.—The returns of the New South Wales Government railways and tramways for August last show total receipts £260,381, an increase of £12,692 over the total of the same month last year. For the eight months of the current year the receipts have been £1,891,229, an increase of £79,337 over the total of the corresponding period last year. The mileage is now 2393, an increase of 30 miles for the year.

THE Callao section of the Argentine Line, purchased by the Buenos Ayres Grand National Tramways Company was opened on the 6th ...

SAN MIGUEL COUNTY, COLORADO.

(BY OUR OWN CORRESPONDENT.)

FEW better illlustrations are found in Colorado of the success with which mining has adapted itself to new conditions than the Telluride district in San Miguel county, and one of its leading mining properties may be taken as an instance of this.

So far back as 1875 and 1876 some very primitive operations were conducted in the local gold placers. In 1877 and 1878 the first important purchase took place in the county—viz., the acquiring by a French company of the Pandora property, who operated it on quite a large scale for several years, although at the time the nearest railroad point was close upon 100 miles distant. Under such considerations the expenditures and receipts were about equal, and the margin of profit, if any, was so narrow as not to justify continued working.

The next sale of any importance was that of the Sheridan in 1886 to British merchants resident in Shanghai, China, and in 1887 the Mendota, Smuggler, and Union were sold partly to the Shanghai merchants and partly to parties resident in America, the American residents having the controlling interest.

A large part of the value of the ores in these mines consists of gold, particularly the Union, which was the only one worked immediately after the great fall in silver in 1893, all the others being shut down.

In 1891 the Smuggler Union Company was organised, being a Colorado corporation, practically a private syndicate composed largely of prominent and experienced Colorado men and their personal friends elsewhere. The company took a lease of the Sheridan and Mendota properties, already owned the Smuggler and Union, in addition to which a number of adjoining properties were purchased and united in one consolidation. The purchase money alone amounted to over £200,000.

Since such consolidation over £40,000 has been expended in putting the properties in such a shape that they can be worked at a profit, even with the present low price of silver, on account of one half the value being in gold. This work includes a shaft 700 feet deep, a tunnel 2500 feet long, a vast amount of underground development, two aerial wire tramways each a mile in length, and a thorough overhauling and enlargement of the concentrating mill.

As an instance of the economy of operation effected by these improvements, it may be stated that whereas under the former management all supplies were conveyed to the mine, and the ore carried down from the mine on a narrow trail on donkeys' backs, representing a total cost of 20s. per ton on all the ore extracted, by means of the shaft, tunnel, and wire tramways above mentioned, the same service is now performed at a gross cost of less than 2s. per ton of ore.

In every possible instance natural gravity is utilised, for which the location of the property is specially adapted. It is reached by a spur of the Rio Grande Southern railroad. One hundred feet above the railroad track is the concentration mill of the company, and 1700 feet above that again is the mouth of a tunnel on the Hermit property, one of the group, the altitude of such tunnel being 10,900 feet above sea level. From the mouth of the tunnel the surface of the properties extends, claim after claim to the number of seven, endwise one after another, for a distance of 1½ mile to the top of the mountain, the surface of the Smuggler being 12,000 feet altitude and the upper end of the Mendota being 13,300 feet. The various claims are opened up by levels one above another, and the lowest tunnel, 2500 feet long, is connected with some of the upper levels by means of the before-mentioned shaft 700 feet deep. The ore is lowered down this shaft, passing thence through the tunnel to its mouth and is then carried by wire tramway to the mill or the cars. Altogether there are about 25 miles of underground workings, making it one of the most extensively-developed properties in the entire western country.

From the various claims now constituting the consolidated property, in former years and under previous ownerships about £1,400,000 (according to smelter returns) was taken, and each of the mines accumulated a considerable dump, which dumps, eight or 10 in number, are estimated to aggregate 150,000 tons, much of it mineral bearing ore of comparatively low grade, which, under former conditions, could not be handled to pay expenses. With the construction of the wire tramways, improved methods of concentration, and reduced railroad freight and smelting charges, these large dumps are now being worked at a profit, as, so far, they show about 12 ounces in silver and 3-10ths of an ounce in gold. They need considerable sorting, which alone costs about 4s. per ton. For the last three months, practically the entire force has been working on the dumps alone, as at those high altitudes it is only during the summer months that such work can be done on account of snow.

During the past three months the only work underground has been the putting of heavy machinery in the 700 feet shaft, through which all the ore goes, except from surface work. As a matter of fact, no ore is hoisted in this property at all, but lowered, and as each succeeding level in depth is worked, the ore is lowered so much less distance to the tunnel. Pumping is not required at all.

At present no further improvements are contemplated, except some additions of appliances to the concentrating mill (capacity 150 tons per day) and possible increase of milling capacity, which, at present, limits the operation of the mine. The average number of men employed is about 250.

Only the higher grade ore is sorted out for shipment direct to the smelters, amounting to two or three cars daily, and it averages, roughly speaking, 1½ ounce gold and 40 or 50 ounces silver per ton. The proportion of silver in the concentrating ore (which at present constitutes the bulk of the output) is about the same, so that the absolute money realised from concentrates and crude ore comes about half from gold and half from silver, the losses in concentration being far less in gold than in silver, as the latter metal is contained in very friable ore, which admits of rather imperfect concentration only.

The property produced during 1894—gold, 13,000 ounces; silver, 355,000 ounces, the smelting charges alone amounting to £17,400. It is expected that the output of the coming year will be very much larger.

The ore reserves are simply immense. Stoping ground is already absolutely blocked out in the mine, which will furnish continuous employment to 200 men for two years, and having regard to the continuity of the vein as opened up through the seven consecutive claims for a distance of 8000 feet, its continuity in depth, as shown by the lowest tunnels and drifts, the continued average width of the vein and its maintenance of character, everything indicates that it will certainly take over 15 years to exhaust the mineral riches of this immense property above the present level of the 2500 feet tunnel, and that its record of £1,400,000 under former ownerships will be very far exceeded by its future output.

Over 50 per cent. of the stock of the company is held in Colorado; less than 40 per cent. is held in other American States, and about 15 per cent. is owned in Europe and China. It is not listed on any Stock Exchange, and none of it is on sale, being held in comparatively few hands. Two of the directors and leading stockholders are prominent Englishmen long resident in Colorado, and of many years' practical local and mining experience.

THOMAS TONGE.

THE GOLD MINES OF THE REMEDIOS DISTRICT REPUBLIC OF COLOMBIA.

By FRANK OWEN.

(*Continued from Page* 1331).

Experimental Cyaniding of Concentrates.

IN 1893 an experiment was made with the cyanide process on these concentrates with the following results:—

Weight of parcel, 7 cwts.

	Gold. ozs.	dwts.	grs.		Silver. ozs.	dwts.	grs.
Assay value ..	16	5	0	..	17	3	0
Assay residues ..	2	8	22	..	5	17	3

Extraction—gold, 85·10 per cent.: silver, 65·88 per cent.

The time of agitation was two periods of 9½ hours each, and two periods at rest in contact with the cyanide solution of 14 hours each.

The precipitation of the gold was on zinc in the usual way.

The standard of the resultant bullion was gold, 0·538; silver, 0·435.

The gold and silver were found to be irregularly divided in the concentrates, which, being slightly acid, were first treated with 2 cwts. of lime solution. At first a solution with 1 per cent. of cyanide was used, which extracted two-thirds of the amount of gold and silver obtained; this was afterwards increased to 5 per cent. strength—viz., in the proportion of 1 cwt. of cyanide to each ton of concentrates.

By grinding the concentrates to pass 90 mesh, and by prolonging the period of agitation, it was found that the residues could be reduced to 1½ ounces of gold per ton, equivalent to 90·76 per cent. extraction.

Cost per ton.

The cost of mining (exclusive of exploratory work), haulage, transport of ore, and milling at the Silencio Mine for the year 1893 did not exceed 22s. per ton, average premium on gold being 150 per cent.

La Salada Mine.

After the Silencio this is the most important of the company's workings. It was the first mine to be worked, and for a good many years was the principal source of ore production. At that period the mineral was chiefly extracted from a large open cast working. Eight years ago the ore becoming poor, it was leased. Some time afterwards the workings of the lessee having exposed some rich ore, the mine was taken over again by the company, and work resumed in 1892. A vertical shaft, 12 by 7 feet, was sunk, which at a depth of 135 feet was connected with the San Joaquin Mine by a crosscut 175 feet long. This crosscut was driven by native hand labour through very hard granite in nine months. The shaft is now sinking below 200 feet, at which level a second crosscut is being driven to cut the main ore deposit. It is calculated that this shaft will itself intersect the vein at 250 feet. The shaft is drained by 10-inch pitwork, driven by an overshot water wheel of similar dimensions to that at the Silencio Mine.

The principal vein being worked at La Salada is a continuation of the Main lode of Silencio. There is another ore body known as the "Hilo de manto," or Flat lode, which, though larger, has not hitherto proved so productive as the first-mentioned. The ore is raised from the shaft by a steam hoist, and trammed 500 yards to the La Salada mills. It is also trammed through a drive on the other side of the mine to the San Joaquin mill.

Native Mills.

There are three mills of the native pattern for treatment of ore from the La Salada Mine, one of 12 head at San Joaquin and two of 12 head at La Salada. These, being typical of the district, will be described in some detail. As the water for driving these mills has to be partially diverted to help the pumping wheel, when the water in the mine becomes heavy they are seldom able to run full time, and the amount of ore crushed monthly in the three mills does not much exceed 700 tons. Their full capacity would be 1200 tons.

Except the heads, the native mills are constructed almost entirely of wood. The first mill in Antioquia was erected in 1828. They are driven direct from the axle of an overshot water wheel, and are on the same principle as the stamps in use for crushing tinstuff in Cornwall. The usual practice, where there is sufficient fall of water, is to have two, three, or even four mills directly below each other and driven by the same stream. It has been attempted to drive a mill of this class with coggearing, but it was found not to answer so well as the old way. The mills are usually of 8, 9, 12, or 16 head; the latter is the maximum. The stamps are arranged in batteries of three or four. The heads are rectangular, and weigh 140 lbs., so that with the wooden lifter, the falling weight of the stamp is 200 lbs. The dies are square and preferably of steel. Cast steel and chilled white iron have been tried for the stamp heads, but have not been found to wear so evenly as the ordinary cast iron heads manufactured in the country. When the heads are worn out they are sent to the foundry in Medellin to be recast; but it is proposed shortly to erect a cupola, and to do this work on the mine. All brass castings for wearing parts both of native and Californian mills, vanners, pumps, &c., are done on the mine. The average life of one of these stamp heads is three to four months, and of the dies six months.

Dimensions.

The dimensions of a typical wheel of native construction are:—Wheel 22 to 24 feet diameter, 2 feet 6 inches to 3 feet breast, 65 buckets. Diameter of driving axle, 2 feet. Framework of battery, 14 feet by 1 foot 2 inches by 7 inches. The foundations, in addition, are sunk 5 feet, thus making the total height of the battery 19 feet. As this class of mill cannot be run much faster than 40 to 50 drops a minute, it is usual to crush considerably coarser in them than is the practice in Californian mills. The screens are 20 mesh, of punched Russia iron with diagonal apertures. The stamps have a 5-inch drop. The battery house is constructed of rough-hewn timber, and thatched with palm leaves.

The ore from the La Salada Mine is at present treated by blanket strakes, subsequent buddling, and grinding of concentrates in arrastres.

A 20-stamp battery of 450 lbs. falling weight, by Messrs. Fraser and Chalmers (Limited), is now in course of erection. It will be driven by a 4-foot Pelton with 90 feet head of water, and the ore will then be treated by plate amalgamation and tanners.

Procedure in Native Mill.

The blanket strakes are of similar dimensions to those already described. The blankets are washed hourly, or in the case of rich ore, every half-hour. The blanketing costs 3d. a yard, and

a strip will last in use from six weeks to two months. There are two convex buddles driven by pulleys. They are 14 feet in diameter, with an extreme depth of 18 inches, and an inclination of 1 inch in 24 from the centre to the edges.

Arrastres.

The arrastres are often driven by wooden spur gearing direct from the main driving shaft. At La Salada the four arrastres for treating the "heads" from the buddles are driven by belting from the driving axle of a separate water wheel. These arrastres are 9 feet in diameter and 2 feet deep. The sides and bottom, as well as the two grinding stones, are constructed of the hardest granite obtainable.

An arrastre of the above dimensions can grind 5 cwts. of pyrites to 100 mesh in 24 hours, making 40 revolutions per minute. It is rare, however, except in very well constructed native mills, that anything like this speed is obtained with the arrastres. About 25 lbs. weight of finely-ground pyrites is taken out of the arrastre during the course of each hour, and a similar quantity of unground pyrites put in to replace it.

Treatment of Pyrites.

The ground material is then very carefully washed on one of the inclined wooden tables already described. The heavy particles remaining in the grooves of the table are washed off with water, and a hard scrubbing brush, such as is used in England for brushing down horses. This highly concentrated stuff is then washed in "bateas" for gold dust, which is finally extracted, much mixed with galena and pyrites, so that the resultant bullion is very base, not running over 0·350 fine in gold. The "bateas," or wooden washing dishes, in use in this district are 16 to 18 inches in diameter and 2 to 3 inches deep in the centre. Any grease adhering to the pyrites is extracted by squeezing into the water the leaves of a plant known as "jabonsillo" (or soap tree), which is strongly alkaline and causes a froth on the surface of the water. Any particles of metallic iron present are removed by a magnet. The residues from the final washings are dried, packed, and shipped to England. They frequently assay 80 to 100 ounces of gold per ton, and even higher, and are called by the natives "moles," a corruption of "molido," or ground stuff. The pyrites before grinding is locally known as "jaguas," and runs from 20 to 25 ounces per ton if well washed free from sand. Such of this as is not ground in the arrastre is mixed with the "moles," and also shipped.

Amalgamation in the arrastre is often carried out in Remedios, but is not practicable with the La Salada pyrites, on account of the appreciable amount of arsenic in the ore.

Extraction in Native Mills.

The average extraction of gold on blankets at the La Salada mine from the three mills (exclusive of that obtained from pyrites in the arrastres) was in April, 1893:—

	Gold. ozs.	dwts.	grs.	Silver. ozs.	dwts.	grs.
Ore .. .. per ton	0	16	8	1	17	0
Sand from blanket strakes to buddles ..	0	7	14	0	11	23
Extraction on blankets	54·57 per cent.			67·56 per cent.		

The tailings from the native mills are dumped and allowed to oxidise for a year or so, when they are rewashed for gold. The dump at La Salada does not run more than 2 to 3 dwts.

Tigrito Mine.

The workings at this mine are on a distinct lode to those already described, and in past years yielded considerable quantities of gold. A deep level crosscut has been put in 58 feet below the old workings, and after 540 feet of drivage, intersected the vein, thus laying open 100 feet of stoping ground.

There are two native mills of 12 head each, of which at present only one is in use.

Cordoba Mine.

This is the principal mine on the "Garibaldi" block, and was acquired by the company at a subsequent date to the rest of their property. The workings consist of a series of drives and crosscuts in the side of a steep hill. The assay value of the vein is ½ to ¾ ounce of gold per ton. As the ore from this mine comes from comparatively superficial workings, it is more oxidised, and contains, consequently, more free gold than is the case at Silencio and La Salada. A deep level is now being driven, which in 500 feet will cut the lode below the present workings, and will expose a large body of mineral ground.

Mills.

There are two native mills of 16 and 12 heads respectively. The extraction on blankets in June, 1892, was—

	Gold. ozs.	dwts.	grs.	Silver. ozs.	dwts.	grs.
Assay of ore .. per ton	0	10	18	1	3	22
Sands from blanket strakes to buddles ..	0	4	0	0	7	14
Extraction (exclusive of subsequent re-treatment of pyrites) ..	62·79 per cent.			68·06 per cent.		

Twelve head of Californian stamps, which it is ultimately proposed to increase to 30, are being erected at Cordoba. They will be driven by a 3 feet 6 inch Pelton with 120 feet head of water. Amalgamation on plates will then be substituted for blankets.

Marmajon and Marmajito.

These are two small mines which were leased by the company in 1886, and taken over again in 1892. The workings at each mine are on a distinct vein. That a Marmajito is probably a continuation of the Tigrito lode. At both these mines deep level crosscuts have been driven. The Marmajon crosscut has to be driven 330 feet to cut the lode, and will give 95 feet of "backs." The Marmajito crosscut has intersected the vein at 575 feet, laying open 200 feet of "backs." There are two native mills of 12 and 8 stamps respectively.

Water-races.

Including the Pocune there are about 30 miles of water-race on the company's property. The usual dimensions are 2 feet wide by 1 foot 6 inches deep, with a "fleet" of 6 inches to 100 feet.

Gold Melting.

The practice at the Frontino and Bolivia mines is to clean up the mills on the 24th of each month. The gold is then weighed up and checked on the 25th, on which day the lessees of small outlying mines have to turn their monthly output over to the company. The bullion melting takes place on the 26th and 27th, and assaying of the bars on the 28th and 29th, so that the remittance is ready to be despatched on the 30th.

The amalgam on retorting yields from 55 to 60 per cent. sponge gold, which loses 1½ to 2 per cent. on melting. The gold is run into bars of 250 ounces each, and the standard of the bullion averages gold, 0·600; silver, 0·350. The melting of the gold dust obtained from the blanket concentrations is considerably more troublesome, especially the gold obtained from pyrites ground in the arrastre. The presence of zinc and arsenic in the bullion is apt to render the bars very brittle, so that they sometimes have to be remelted several times. The gold dust is melted in plumbago crucibles with about one-third of its weight of sulphate of iron, as clean as can be got (slags from previous meltings if possible). When the contents of the crucible are well melted, scrap iron is carefully added bit by bit, for purposes of desulphurisation. The melting will take from a quarter of an hour to 20 minutes with a good fire. Good charcoal for melting purposes is rather expensive, as it has to be brought a considerable distance, and costs about 1s. 6d. per sack of 50 lbs. The melting houses in Medellin have the advantage of coke as fuel, so that the crucible does not have to be covered during melting, as is the case with a charcoal fire. Loss in melting is very variable; 10 per cent. is considered good, whilst 2b per cent. is not uncommon. The standard of the resultant bullion will vary considerably according to the loss in melting—say, from 0·400 to 0·550 gold, and from 0·200 to 0·300 silver. The slags from the meltings to which a good deal of gold is apt to adhere in spite of all precautions, especially when the dust contains any notable proportion of lead, are run down every six months, until no further bullion can be got out of them. The residues are then ground and shipped to England. The floor of the melting house is of earth, and is dug up after each melting, and put through the nearest mill, together with any worn-out crucibles.

Labour cost.

The usual rates of wages paid to natives at the mines, calculating the premium on gold at 100 per cent.—i.e, the paper dollar as equivalent to 2s. sterling, are:—

Mine bosses	£6 to £10 per month.
Shift do.	£4 to £5 „
Millmen	£3 to £4 „
Mechanics and fitters ..	4s. to 5s. per day.
Blacksmiths and carpenters	2s. 6d. to 3s. per day
Masons	3s. to 3s. 6d. „
Miners	2s. to 2s. 6d. „
"Peons" (day labourers)..	1s. to 1s. 6d. „

This latter class includes most of the ordinary surface hands. Boys and women 9d. and 10d. per day. As much as possible of the underground work, such as sinking, driving, and stoping, &c., is let on contract by the month, as also timber cutting and hauling, charcoal burning, &c. In addition, all the company's employés receive their food, two meals daily, and lodging if desired.

The prices of provisions vary a good deal according to the season, state of roads, &c., but 1s. to 1s. 3d. per head per day may be taken as fair average. Latterly it has been found to pay better to import certain articles, such as lard "frijoles" (beans), &c, from the United States than to purchase them in the country.

In February of the present year there were 1100 workpeople on the company's books.

Leased Mines.

The Frontino and Bolivia Company have also six small mines let on leases for periods varying from one to six years, at 20 to 25 per cent. royalty on the gross monthly output. During the six months from June to December these mines produced 1084·20 ounces of bar gold, valued at £2736 19s. 5d.

Total Output.

The total output of the company's mines is given in the accompanying tabulated statement for the six months ending December, 1894. The average value per ton of ore in bullion extracted is 18 dwts., or £2 2s. 3d.; adding the concentrates brings the total value up to £2 7s. 9d., or 1 ounce 7 grains per ton. The total yield from the mines (inclusive of those on lease) in bullion and concentrates is £52,751 15s. 9d.

The figures for the year 1893 are as follows:—

36,367 tons of ore crushed, yielded 39,702·63 ounces of bullion, and 258·58 tons of concentrates.

The total value of above (exclusive of the leased mines) was £85,935 12s. 10d. Average value of ore per ton in bullion and concentrates £2 7s. 3d.

The values in the table are calculated in gold dollars at $5 = £1.

TABULATED STATEMENT OF THE OUTPUT OF THE FRONTINO AND BOLIVIA MINES DURING THE SIX MONTHS JUNE TO DECEMBER, 1894.

Name of Mine.	No. of Heads at work.	Tons of ore crushed.	Gold won in Bar Oz. Troy.	Value of Gold. £.	Value of Gold. s.	Value of Gold. d.	Concentrates. Tons.	Assay Value. Oz. Gold.	Assay Value. Oz. Silver.	Total Contents. Oz. Fine Gold.	Total Contents. Oz. Fine Silver.	Value of Concentrates. £.	Value of Concentrates. s.	Value of Concentrates. d.	Total value of Produce £.	Total value of Produce s.	Total value of Produce d.
Silencio	44	12,380	14,738·97	171,415	04		145 322	9·87	14·26	1434·94	2071·92	22,711	13	17	194,126	17	
La Salada	27	4,238	1,736·67	20,391	19		0 807	43 01	34·83	34·72	28 12	697	69	88	21,088	88	
Córdoba	24	3,389	2,061·90	25,735	68		0·092	158·50	106·20	14 65	9·81	308	14	82	26,043	82	
Tigrito	12	677	190·66	2,291	40		—	—	—	—	—	—	—	40	2,291	40	
Marmajon and Marmajito. ...	10	707	556·62	6,347	03		0·114	74·30	83·00	8·47	9·46	176	71	74	6,523	74	
Total	117	21,391	19,294·62	226 180	34		146·335	10·20	14·49	1492·78	2119·31	23,893	67	01	250,074	01	

	£	s.	d.
Value of Gold	45,236	1	4
„ Concentrates	4,773	14	8
Total	50,014	16	0

Average extraction per ton:—Bullion, 0·90 oz.; Fine Gold, 0·57 oz.
Silencio Mine only... ... Do. 1·19 oz.; Do. 0·63 oz.

There are now 117 head of stamps at work in the mines, 24 being of Californian and 93 of the native pattern. The number of Californian stamps is now being increased by 48, viz., 16 additional head at Silencio, 20 head at La Salada, and 12 at Córdoba Mine. *(To be continued.)*

MEETINGS OF MINING COMPANIES.

EAGLE'S NEST GOLD MINING COMPANY, LIMITED.

THE statutory meeting of the Eagle's Nest Gold Mining Company (Limited) was held on Monday, at Winchester House, Mr. G. T. RAIT presiding.

The CHAIRMAN said: Gentlemen—The capital of the company as you are aware, was £60,000, of which £30,000 is working capital, the remaining £30,000 being issued to the vendor company, the Pigg's Peak Development Company, as to £28,000 in fully-paid shares, and £2000 in cash. This cash has been paid, and the 28,000 shares have been allotted. The whole of the £30,000 working capital was subscribed for by the shareholders of the Pigg's Peak Company, 5s. per share being called up, and the calls have been well met. The company was registered on July 25 last, and the transfer of the licenses to this company was completed on October 14. The number of shareholders is about 800. Mr. Dicey was appointed temporary manager. He has visited the property frequently and has a full knowledge of every detail connected with it. Mr. Percy Whitehead, who is a director of the Pigg's Peak Company, and largely interested in that company, and also in this company, has recently gone out to confer with Mr. Dicey as to the best means for erecting a battery and the necessary works at our mine. I believe Mr. Whitehead is now on his way from Capetown to meet Mr. Dicey. Before he left I had an interview with him, and I may say that we have been very much guided by both Mr. Dicey and Mr. Whitehead in coming to a decision as to whom we shall let the contract for putting up the battery. I don't think we should be in too great a hurry in entering into this contract. Another important matter is that the development work ought to be proceeded with to a greater extent than has yet been possible before we decide where our battery ought to be put. This brings me to the original statements in the prospectus which was issued, and also to the more recent reports from Mr. Dicey as to the assays made. You will recollect that we had one assay made as high as 9 ounces to the ton, and other assays have varied from that even to, perhaps, 8 dwts., and even to 5 dwts. per ton. The September report gave you the latest information as to the assays, and showed only an average assay of 7 dwts. 2 grains. That by itself might be taken as disappointing, but I would warn the shareholders not to rush to any conclusion merely on this one report. To begin with, they have been suffering at the colony from drought, from scarcity of labour, and from many other circumstances which no doubt would have influenced this particular return. The mail has arrived to-day, and I was in hopes that there might have been some farther letter, but, of course, it would not be time to get the October report, which will arrive in due course. My own impression is that we must wait for further development before speaking with certainty, but from what Mr. Whitehead told me, and from the other letters of Mr. Dicey, it seems fair to expect that this particular property would, on an average, yield 1 ounce to the ton. This is my own impression, but, of course, it is impossible to tell what is under the ground. I do not know that I can say very much more except that we have ample funds in hand for the present. I do not think the board have any immediate intention of making a call. You all know that within the last few days things in the South African Mining Market have been exceedingly depressed for everybody connected with it, and, unfortunately, our meeting to-day has happened when this cloud is passing over us. But I have no hesitation in saying that the prospects in the Barberton districts are exceedingly bright, and Mr. Dicey, says that we have an exceedingly valuable property. There is one thing we are determined to do. The board here will not waste your money in any way. They will continue to go on carefully and economically, trying to serve your interests in the best way possible. Ultimately we shall have to decide, no doubt, on the contractor, and also as to who is to be the future manager. That is a most important matter, and we will be guided in our decision very much by the opinions of Mr. Whitehead and of Mr. Dicey. At present there is an experienced miner in charge of the development works. The expenditure is not great up to date, as Mr. Dicey is authorised to spend at present only about £300 per month, and that sum will not be increased very much. There are 2000 shares still available to be issued, but all the rest are issued. I do not know whether we shall issue them now or not, but possibly we shall not issue them unless it is at a small premium. We have power to issue them at par, but not under par. The other shares were all taken and paid for. I have a letter here, which I think I ought to mention. It is from Mr. Cox, who is on the board, but who is, unfortunately, laid up, and is unable to be present. As you are aware, there are only three directors in this company, myself—who, as Chairman of the Pigg's Peak Company, was asked to join this board—Mr. W. J. Flint, who is here, and Mr. Cox.

A vote of thanks to the Chairman terminated the proceedings.

TRANSVAAL GOLD EXPLORATION AND LAND COMPANY, LIMITED.

An extraordinary general meeting of the Transvaal Gold Exploration and Land Company (Limited) was held on Monday, at the Cannon-street Hotel, Mr. NICOL BROWN presiding.

The SECRETARY (Mr. C. E. Wells) read the notice convening the meeting.

The CHAIRMAN said the committee who were entrusted with the duty of considering the proposed scheme of amalgamation had presented their report, and it now fell to his lot to propose the following resolution:—

> That the conditional agreement, dated October 3, 1895, and made between the Transvaal Gold Exploration and Land Company (Limited) of the first part, the Lydenburg Mining Estates (Limited) of the second part, and Nicol Brown, William Mortimer Farmer, Alexander Cunningham Bruce, and William Johnstone Steele, of the third part, as modified and varied by a supplemental agreement, dated November 1, 1895, and made between the same parties as the said agreement, which agreements have been read at this meeting, be and the same is hereby adopted, and the directors are hereby requested to carry the same into effect.

Mr. A. R. SMITH (Chairman of the committee), in seconding the resolution, remarked that the whole committee considered it a very great trust and responsibility to have to look into the matters referred to them. They had met a great many times, and had devoted to the work a considerable number of hours each day for a whole fortnight, with hardly an omission, before deciding upon their report. As to the committee itself, his impression was that at the outset there were five members against amalgamation, and two in favour. One gentleman, a resident of Liverpool, undertook the trouble and expense of coming to London to almost every meeting; another had had practical mining knowledge; a third was thoroughly acquainted with the whole of the history of the company; and another devoted his entire legal knowledge to their assistance, and it was to that gentleman they owed the wording of the report. The Chairman of the company gave them the very fullest information in his power. They might say that the evidence the Chairman would give, he having already sanctioned the scheme, would, of course, be in its favour. They then had the evidence of the manager from the Transvaal, who was examined in the absence of Mr. Nicol Brown, and many searching questions were put to him by the various members of the committee. He (the speaker) would point out that that gentleman would lose his position by the amalgamation of the two companies; he was at present the head in the Transvaal, but he did not think he could be expected to remain the head under the amalgamation. Their manager was entitled, if certain profits were made—and they had all been believing they were going to make large profits—to participate therein; but if the amalgamation scheme were passed, he would not do so. If, therefore, he had any personal bias in the matter at all, it might be

taken that his evidence would have been given more in favour of remaining as they were than otherwise. But the evidence of their manager agreed very closely with that of the Chairman on many points—not closely enough to lead them to believe it had been cooked, but sufficiently to show that each gentleman was honestly giving his belief. They also had the advantage of the evidence of Mr. Benjamin, one of the directors of the Lydenburg Mining Estates, who placed at the disposal of the committee an amount of information which enabled them to check the correctness of that given by Mr. Nicol Brown and Mr. Spiers, and he (the speaker) was very much surprised that that gentleman should give them stronger testimony as to the value of their own land than they had had from their own side. Surely Mr. Benjamin's interests would have been, had he shown any at all, to give evidence on his own side, and not on theirs; and had the shareholders generally heard the information he gave, they would certainly have felt they owed a debt of gratitude to him, not only for his evidence, but also for the kindly spirit in which he placed it before them. Of course, the principal matter the committee had to consider was why they should amalgamate. In considering this question, the committee commenced by enquiry into the water, coal, and railway facilities, which it was impossible to separate. The evidence given to the committee as to the necessity of greater motive power than they could get from water was overwhelming. Coal was so far away from them, and the railway was so far from the property, that coal was unprocurable. Then the question arose as to whether the Transvaal Company could build a railway by itself. He came to the conclusion that it could not. They next enquired whether the amalgamated company would build a railway, or whether the directors and the principal shareholders of the amalgamated company would go into a scheme by which a railway would be constructed to bring them and the other mines in the district coal. Individually he had very strong hopes that that would be done, but he thought it was of very great importance as to whom it was to be done by. If that railway was built without their being amalgamated, the site of it might be changed. It was very likely that if they were amalgamated the railway would come through part of their land and part of the Lydenburg Company's land, but if their land did not belong to the larger company it would go through the other company's land, and this company would, therefore, be left out in the cold. That was one very strong reason why he considered amalgamation advisable. With regard to the acreage of the land, nobody doubted that they possessed the best property in the district. It was acknowledged by the Lydenburg Company that a portion of the Transvaal Company's land was the most valuable. When, however, they came to enquire into the forces they could put forward to extract the gold, as compared to the forces that the amalgamated company could, they came to the conclusion that it was to the interest of the shareholders to amalgamate, even if they compared the amount of land to what was at the present time known as gold-producing. Taking that alone, he honestly believed that by amalgamation they would obtain larger dividends than they would if they did not amalgamate. But there was a much greater question behind. He thought most of them were of opinion that they must look to the thousands of tons of low-grade ore rather than to a few hundred tons of high grade, and if that were so the total acreage which they believed would produce gold was the most important consideration for them. In the committee's report they had tried to put the relative value of the land of the two companies in parallel columns, and if the shareholders would look at the maps with which they had been furnished, they would ascertain what was called proved ground and what was not; and they would see at once, he thought, the advantages of having the whole of this area to extract gold from, which they would do by adopting the amalgamation scheme. The committee having decided that amalgamation was advisable, the next question was how it was to be effected. They felt that the objections to the scheme were very great indeed, but, thanks to Mr. Ledger Smith, a member of the committee, they had, he thought, made it an intelligent scheme. After deducting the gift to the directors, it gave 35,000 shares to be added to 260,000 held by the shareholders, or two additional shares to each holder of 15, and left, after providing for the debenture debt and the proposed gifts to the secretary and staff, some £70,000 to be divided over the 260,000 shares, which worked out at something like 5s. 5d.; but taking it at 5s. the shareholders would receive an immediate payment of that sum from the company. By the old scheme they had to provide some money with their left hand before they received it with their right. The new scheme, he thought, was plain and concise. The committee had more than one interview with Mr. Benjamin and Mr. Wernher, of Messrs. Wernher, Beit, and Co., with regard to the Articles of Association. Both those gentlemen acknowledge that their Articles of Association were defective. They had been compiled when their company consisted of only a few shareholders, and, therefore, they were not at all adaptable to a large company such as the amalgamated one would be. The committee asked whether there would be any objection to an alteration of the Articles, and they at once consented to allow them to be brought more in harmony with the usual Articles of Association in vogue in England. They would of necessity have to be slightly altered, because there was one clause which stipulated the exact number of the directors. He had received a letter from a shareholder in Dublin, pointing out that in some Articles of Association the power of issuing new shares was not properly defined, and stating that that point ought to be carefully considered. He also thought the London board should be something more than a consultative board—namely, real members of the board. He (Mr. Smith) considered that the shareholders owed a great debt of gratitude to Mr. Spiers, the company's general manager in the Transvaal, for all his work in the past—(applause)—and he was sure the committee would be very glad if a shareholder would move a vote of thanks to him. He would even go further, and suggest that the directors should present him with some little testimonial as a recognition of his previous hard work. (Applause.) The shareholders might ask the committee—"Do you believe that we, the shareholders in the Transvaal Company, will receive as much in dividends in (say) two, five, ten, and fifteen years if we amalgamate with the Lydenburg Company, as we should if we remain as we are?" His answer to that was—"Yes; in the two years, and considerably more in the succeeding years." (Applause.)

Sir JAMES KITSON, M.P., expressed his approval of the scheme, and referred to the resolute manner in which the directors had stuck to the property in bad times, and brought it to its present position.

The resolution was then put and carried with four dissentients.

The meeting, on the motion of Mr. T. A. SOMERS SCOTT, resolved that 5000 of the shares to be allotted by the Lydenburg Mining Estates to the Transvaal Gold Company be transferred and made over to the directors of the company, to compensate them for their loss of office, and to be accepted by them in full discharge of all claims (if any) by them respectively upon the company for remuneration under Article 81 of the Articles of Association in respect of all profits earned on the sale agreed to be made to the Lydenburg Mining Estates, in the following proportions—namely, to Mr. Nicol Brown 2000 shares, Mr. W. M. Farmer 1000, Major-General A. C. Brace 1000, and Mr. W. J. Steele 1000; and that £1000 be paid to Mr. C. E. Wells, the secretary, out of the funds of the company, to compensate him for his loss of office, and that £500 be paid to the office staff to compensate them for loss of office, in such proportions as the board might determine.

Mr. JAMES HAY proposed a vote of thanks to Mr. Spiers for his services to the company in the past, and recommended that the directors, in accordance with the suggestion made by the Chairman of the committee, should make any present to him that they thought fit.

This was seconded and carried.

A vote of thanks was accorded to the committee, and it was agreed that the expenses they had incurred should be paid by the company.

The proceedings terminated, with a vote of thanks to the Chairman.

We have received a copy of a speech prepared by Mr. Nicol Brown for the above meeting, but which, owing to the lateness of the hour to which the proceedings were prolonged, remained undelivered. At the outset Mr. Brown made allusion to the early reports upon the property, the predictions of which had not been borne out by subsequent results. He then proceeded:—What happened next was this: the board having got evidence, as they thought, of proved reefs and hydraulicing ground, sent out a well-known mining engineer, Mr. Gardner F. Williams, to work what had been found. Then came the report of Mr. Gardner F. Williams, which has been referred to to-day. After exhausting the whole question in detail, he ended one of his reports in July, 1885, with these words:—"I have gone over the property from end to end, and with a long experience I don't know where to set men to work with any chance of finding anything." Mr. Williams did not go out to discover reefs on our farms; he went to work those that had already been found and described in detail by the two geological experts mentioned above. Mr. Williams not only disposed of the theories of these experts, but he gave the first practical suggestions as to the true geological character of the country—namely, that it was built up of stratified rocks. He admitted there was gold in them, but he thought there was not enough to pay; in this his forecasts were not realised. The Johannesburg engineers who have been visiting the property lately have declared that if they had visited it at the time when Mr. Gardner F. Williams visited it, when there was no exposed rock faces, they would also have condemned it as an unlikely field for profitable operations. I can never forget the circumstances of the shock which followed Mr. Williams' report. The old board of the first company resigned, and I am the only representative of the first company left on this new board, which is the second company, reconstructed in 1885. The disappointment caused by Williams' report was keen and far-reaching, and the cloud continued to hang over the reconstructed company for years, and extended itself to all the Lydenburg district round about. To-day you have rolled back many hitherto apparently wasted years, and made them fruitful by your kind vote of 2000 shares in the third company, which I consider amply repays me for all I have done for you. Starting with the slender but correct suggestions of Mr. Williams as a nucleus—namely, that the country was built of stratified rocks, your directors then, after a while, began to consult Professor Rupert Jones on the physical details of the structure of the country. If we had been on the spot this would have been an easier matter, but we had to do it by correspondence with the mines, and had to wait a long course of post between our enquiries and the replies that came to them. Slowly, year by year, it began to be unfolded to us through the medium of Mr. Spier's accurate replies to our enquiries. I cannot speak too highly of his unceasing endeavours to trace out the position of the gold deposits and faithful and intelligent efforts to carry out the instructions he received from the board, which have resulted in the success we have achieved. His reports showed how the country was built up, and the zone in which the gold deposits lay was ascertained. When this was established, prospecting became a much easier matter, and from time to time your board reported to you the advances made in our geological knowledge of the country. You all know the great interest that the late Sir Charles Mills took in the development of South Africa, and on one occasion he made a declaration at the Colonial and Indian Exhibition (*see Mining Journal*, July 3, 1886) to this effect, that if people would consult such geologists as Professor Rupert Jones instead of false prophets or pseudo-geologists, it would be more satisfactory, and *bona fide* schemes would not be ruined. As an ordinary business man I fear we should have long ago given up the Transvaal Gold Mines in the same way that we have seen other good properties given up when misunderstood by their directors. The assistance, however, we received from Professor Rupert Jones, in interpreting the geological features of the country, kept alive the hopes of our property in time proving to be of value, as a period when otherwise they would have died, and we heartily endorse, from experience, what Sir Charles Mills said in 1886. As geology has had to bear the brunt of the errors of many pseudo-professors, I am glad of the opportunity of recording this case where it has been, in competent hands, abundantly successful. I may say I hope soon to visit the property, and see it for myself.

SOUTHERN NEW CHUM GOLD MINES, LIMITED.

The first ordinary general meeting of this company was held on Tuesday, at Winchester House, Mr. R. HOFFMAN in the chair.

The SECRETARY (Mr. H. J. F. Crane) having read the notice convening the meeting,

The CHAIRMAN said—This is the statutory meeting of the company, enacted by the Government as a very wise means of letting the subscribers know into what sort of concern they have placed their moneys. (Applause.) It also gives an opportunity of introducing the shareholders to the directors, and the directors to the shareholders. The moment is hardly a very happy one just now to mining investors, as probably one and all of us have suffered more or less from the depreciation which has taken place within the last week or two; but those who have put their money into sound concerns, carefully and honestly managed, need have no reason to be anxious. It is in this case, as in all others, with mining properties; it is the mine that is going to carry us through. It is no good expecting a thing to pay you just because it is inflated on the market; it is the mine only that will carry us through in the long run. (Applause.) We were registered on July 3, and went to allotment on the 31st, with a working capital of £10,000. The property has been practically transferred to this company, but there are yet certain formalities—red tape formalities—to be gone through before we are really in possession. I would not say in possession—I mean before we receive our leases—because the vendor company have already put us in possession. These leases are granted from the Victorian Government, and it has been necessary that the whole of the leases which the New Chum Company—the parent company—had should be surrendered, and leases are now being granted to the two companies interested, the Southern New Chum and the New Chum Gold Mines. The reefs on the Bendigo Field, of which the New Chum lode is the principal one, as you are aware, are anti-clinal or saddle reefs. The saddle formation is like the saddle of a horse. The pommel is called the apex, and the flaps—the sides of the saddle—are called the legs of the reef. This formation repeats itself at various intervals all the way down. They incline into the earth, and there is one formation almost below the other. In fact, in one case we know of—the Lazarus—which is on the same line of reef as ours—from the surface down to 2200 feet they found 24 of these saddles. Of course they are very long, several miles in length, and they repeat themselves one below the other.

A SHAREHOLDER: And what distance is there generally between?

The CHAIRMAN: I fancy something between 60, 80, and 100 feet, sometimes more; but, as I say, 24 were found in 2200 feet, but sometimes, I think, there are 200 and 300 feet between each. I will not say more about the general formation, as we are fortunate in having Mr. Samuels present to-day—a gentleman who is accredited by the Victorian Government. With regard to our position, I feel we are fortunate in that the New Chum, our immediate neighbour to the north, has already struck a very promising formation. There is no doubt that these new lodes in the New Chum must necessarily be found in our mine. They are now opening them, and they should be in a state of production within the next month or so. We expect to open ours within six or eight months from now. (Applause.) We have already contracted for one shaft, and our manager, who has been in Bendigo for many years, Mr. Rulleps, is energetically sinking at this moment. We are constantly in cable communication with him. We have ample working capital, an energetic board, and with the large experience which our colleague, Mr. H. J. Etherington, has had out there, we venture to say the moneys entrusted to us will be carefully and ably administered, and I predict a very brilliant future for our enterprise. (Applause.)

Mr. WATTS: You have said nothing about the machinery.

The CHAIRMAN: We do not expect to put up machinery until we have the actual ore in sight to crush. The machinery facilities on the Bendigo gold fields are such that at any moment, or within 24 hours' notice, you can hire a 20 stamp battery. It would not be advisable to go to expense as yet; far better will it be for us to put our money into development until we have enough ore to keep us going regularly. We shall not, probably, require any pumping machinery, because the New Chum to the north is practically pumping our mine for us.

Mr. LOUIS A. SAMUELS, after speaking of the boom in the Transvaal and West Australia, said Victorian mines had no champion here, and, therefore, English capitalists had neglected them. Had British capital not been invested in Johannesburg mines in so short a time, the individual miner there would have had to struggle just as his Victorian brother had to obtain results. During the time Victoria had been a gold producing country—that was for about 40 years—it had sent to London at the rate of 1 ton of gold per week; it had sent to London over 2000 tons of gold. Except the North-Western part, the whole colony was one gold field. As he had said, the Victorian miner had had to depend on his own resources to develop this vast gold field, and the result had been that in many cases operations had been neglected. Diggers, after they had acquired a certain amount of independence by gold mining, had embarked in other lines of business, and, therefore, in a great number of cases, mines were neglected, and had never been opened since their abandonment. Only two years ago the Victorian Government made inquiries as to several neglected gold fields, and issued a pamphlet showing the immense possibilities for the investment of capital in *bond fide* mining. Some places, like Ballarat and Bendigo, had been exempt from this neglect. They continued to produce gold. What Bendigo had given to the world was this. It had produced about two-sevenths, or nearly one-third of Victorian gold. After alluding to the excessive land speculation and critical position of the Australian Banks in 1893, Mr. Samuels went on to say that Bendigo in the troublous times of the bank failures stood in the most unique position, inasmuch as that while in other districts the banks were closed, the branches at Bendigo remained open perforce to carry on the gold mining business. The mines that were neglected only waited investment of capital and development to show they were as good as those that were being worked. Mr. Samuels instanced several mines which, after lying idle, or being closed down, for years, turned out valuable dividends when properly worked. He then proceeded to speak of the character of the strata, which he said ran in curves, one curve over the other, between the different layers of sandstone and slate. At certain distances between each other they found the reef formation. They conformed with the stratification of the country, and ran in the same direction in curves. There were different formations, some 20 or 30 feet below each other, and sometimes they had to go 200 feet before they got the next payable body. But, so far as mining was concerned, they had found the formation at depths of 3200, 3000, and 2900 feet. It had been computed by a geologist of standing, on close examination and measurement, that the Silurian strata which contained the Bendigo gold reefs proved to extend to 35,000 feet in depth, so far as the reef had gone; and so far as the country had been examined between the surface and the bottom, there was no difference whatever in the character of the country, of the reefs, nor of anything they found. The work done in their mine was accomplished by means of compressed air. After stating that the cost of labour was only from £2 5s. to £2 10s. per week per man, Mr. Samuels went on to say that the properties to the south of Bendigo, and particularly the New Chum and its daughter, their own property, were to his knowledge held in high esteem. (Applause.) They must understand that it was proved by 40 years' experience that wherever a Bendigo mine had been rich in its upper formation it was quite certain—there was never any exception—that it also proved rich at lower depths. The property of the New Chum Gold Mines (Limited) had proved very rich in its upper formation. It had been one of the richest mines in Bendigo, but, like a number of others, had been neglected for years. And when he spoke of the New Chum he spoke also of the Southern New Chum, its daughter; and he had no hesitation in saying that it would in the future prove one of the best mines in Bendigo. (Applause.)

The CHAIRMAN thought they were all indebted to Mr. Samuels for his kind and interesting speech. (Applause.)

On the motion of Mr. POLDEN, a vote of thanks was accorded the Chairman and directors.

The meeting then terminated.

TILT COVE COPPER COMPANY, LIMITED.

The seventh ordinary general meeting of shareholders in the Tilt Cove Copper Company (Limited) was held on Wednesday, at the offices, 6, Queen-street-place, the chair being occupied by Mr. J. R. FRANCIS.

The SECRETARY (Mr. E. C. Leaver) read the notice convening the meeting.

The CHAIRMAN called upon Mr. J. C. Leaver to make a statement respecting the company's position.

Mr. J. C. LEAVER said: Gentlemen—The Chairman desires me to say that these accounts only bring us up to August 31, 1894. As a matter of fact this concern, as you know, is being carried on by the Cape Copper Company, and in the course of a few weeks they will issue their report, which will include an account of the working of this company up to August 31, 1895; so that, practically, our present accounts are not of much interest. Beyond this I have really nothing to say, but we can promise you that the accounts, which will be presented to you shortly, will be very much better than those now before you. How much better they will be I must not say because they are now being compiled for audit by the Cape Copper Company. This is merely a formal meeting, held in compliance with the statute.

A SHAREHOLDER asked if the accounts to be submitted shortly would not show a material improvement owing to the rise in copper.

Mr. LEAVER: We quite hope that our next accounts will show a very much better state of affairs, but I shall be telling you the Cape Copper Company's business if I say more. We consider that with the present price of copper we are in a much improved position. Our losses have stopped.

On the motion of the CHAIRMAN, seconded by Mr. JOHN TAYLOR, the report and accounts were adopted.

On the motion of the CHAIRMAN, seconded by Mr. SEXTON, Mr. J. C. Leaver and Mr. John Taylor were re-elected as members of the committee of management.

The auditor, Mr. William Barclay Peat, having been reappointed, the proceedings terminated in the usual manner.

THE FINANCE CORPORATION OF WESTERN AUSTRALIA, LIMITED.

An extraordinary general meeting of the shareholders of this company was held on Wednesday, at Winchester House, Old Broad-street, E.C., under the presidency of Major-General BATES, to confirm the following resolutions passed at the extraordinary general meeting held on October 23, 1895:—

"(1) That each of the £10 shares in the capital of the company be subdivided into ten shares of £1 each, and that the shares resulting from such subdivision be numbered from 1 to 50,000."

"(2) That the nominal capital of the company be increased from £50,000, divided into 5000 shares of £1 each, by the creation of 150,000 additional shares of £1 each, and such additional shares, and any of the original shares at present unissued, be allotted by the directors to such persons, at such times and on such terms (not being less than par) as the directors see fit."

The SECRETARY (Mr. J. R. Wigginton) having read the notice convening the meeting,

The CHAIRMAN said: Gentlemen—You are called together to-day

to confirm the resolutions that were passed at the meeting held on October 23 last. I think I explained on that occasion the very excellent prospects the corporation had before it, and your directors, having satisfied themselves that it would be to the benefit and to the profit of the company that the capital should be increased, have recommended that the £50,000 should be increased to £200,000, which was carried at the last meeting. For the shares we now propose to issue the existing shareholders have had the opportunity of subscribing their fair proportion, and they have been well taken up so far. In any further issue, of course, the existing shareholders will have the opportunity, of which due notice will be given them, of taking up the shares. All those not applied for we propose should be offered on the market at a premium of 2s. 6d., and we consider that with the very excellent prospects of this company, as well as the established business we already have ensured, and the number of different people connected with the company both at home and abroad—we consider that our shares at 2s. 6d. premium would be about as good as any shares on the market. In conclusion, gentlemen, I beg to tell you that the warrants for the 50 per cent. dividend, which was declared at the last meeting as an interim dividend, will be posted in the course of the week. (Applause.) I now beg to move the confirmation of the resolutions passed at the last meeting.

Mr. DOUGLAS WALES seconded the motion, which was carried unanimously.

Mr. CLARKE proposed a vote of thanks to the Chairman, which, on being seconded, was carried unanimously.

The CHAIRMAN: In thanking you on behalf of my colleagues and myself for your kind vote of thanks, I beg to say that I consider this corporation to be one of the first in London. As far as your directors are concerned, they will leave no stone unturned, and they will look to your interests in every way. We feel it an honour to be your representatives.

The proceedings then terminated.

WEST KITTY MINE COMPANY.

An ordinary general meeting of the shareholders in this company was held at the offices, 37, Walbrook, E.C., on Wednesday last, for the reception of accounts, and other general business.—The chair was occupied by Mr. JOHN B. REYNOLDS, Chairman of the company.

The SECRETARY (Mr. Fredk. J. Harvey) read the notice convening the meeting.

The statement of accounts and the agents' report (copies of both having been circulated in the meeting) were taken as read.

The statement of account from July 20 to November 11, 1895, showed:—Receipts: To sales of black tin, 108 tons 7 cwts. 1 qr. 13 lbs., £4502 12s. 5d.; to discounts from merchants, £32 4s. 11d.; to balance of south section capital account transferred to this account, £12 10s. 11d.; to loss, £170 9s. 8d.; total £4717 17s. 11d.—Expenditure: By labour costs, including merchants' bills, £4398 13s. 5d; by dues to F. G. Enys, Esq. (less income-tax), £62 0s. 1d.; by dues to Lords of Chytodden (less income-tax), £65 15s.; by dues to Duchy of Cornwall (less income tax, £32 11s. 2d.; by dues to Lords of Tywarnhayle Tyas (less income-tax), £21 10s. 7d.; by dues to Viscount Falmouth (less income-tax), £2 13s.; by dues to John B. Reynolds, Esq. (less income-tax), 17s. 8d.; by dues to Mrs. Jane Vivian (less income-tax), 17s. 8d.; by minimum and other rents (less income-tax), £47 0s. 11d.; by St. Agnes parish rates, £85 9s. 5d.; by bankers' charges (cheque book and telegrams), 9s.; total, £4717 17s. 11d.; balance at the bankers, £1020 18s. 11d.

The company's agents, Captains Joel Hooper and John Williams, reported as follows:—West Kitty Mine, St. Agnes, Scorrier, Cornwall, November 8. To the shareholders: Gentlemen—We beg to hand you the report of the mine. In the 94 fathom level driving west the lode is small, yielding stones of tin, but not to value. In the 84 west the lode is from 2 to 3 feet wide, worth for tin £8 per fathom. We have driven through 25 fathoms of good tin ground at this point. The rise in back of this level is worth £9 per fathom. In the 72 driving west the lode is 2 feet wide, and worth £7 per fathom. In the 60 fathom level driving west the lode is from 3 to 4 feet wide, and worth £9 per fathom. We have driven through about 12 fathoms of good tin ground at this point.—South Section. In the 60 fathom level east, south of slide, the lode is about 3 feet wide, worth £8 per fathom. The No. 2 rise in back of this level is worth £8 per fathom. In the 60 fathom driving west the lode is about 2 feet wide, and worth £7 per fathom. This end is about 6 or 7 fathoms east of Thomas' shaft, and we calculate it will take us about six or seven weeks to get back to Thomas' shaft. The men are pushing this end with all speed. In the 50 fathom level driving east the lode is 3 feet wide, and worth £8 per fathom. In the 50 fathom level driving west the lode is about 2 feet wide, and worth £7 per fathom. In driving, rising, and sinking, we have 30 men in this part of the mine. Thomas' shaft is sunk 62 fathoms below the deep adit. This shaft is suspended for the present, owing to the increase of water. We have about 2 fathoms more to sink to communicate with the 60 end west. The shaftmen are now engaged in cutting ground in the shaft, and preparing for fixing the other lift.—Stopes. The stope in bottom of the 84 fathom level is worth £10 per fathom. The stope in back of the 84 fathom level is worth £14 per fathom. The stope in back of the 72 fathom level is worth £12 per fathom. The stope in bottom of the 70 fathom level is worth £15 per fathom. No. 1 stope in back of the 70 fathom level is worth £12 per fathom. No. 2 stope in back of the 70 fathom level is worth £10 per fathom. No. 1 stope in back of the 60 fathom level is worth £14 per fathom. No. 2 stope in back of the 60 fathom level is worth £16 per fathom. No. 1 stope in back of the 50 fathom level is worth £14 per fathom. No. 2 stope in back of the 50 fathom level is worth £12 per fathom. No. 1 stope in back of the 40 fathom level is worth £10 per fathom. No. 2 stope in back of the 40 fathom level is worth £12 per fathom. We have 40 men on tribute, varying from 9s. to 13s. 4d. in the £. There are 24 men driving and rising at Reynolds' shaft, and 54 men stoping. All the machinery throughout the mine is working well, and the stopes and tribute pitches continue to yield the usual quantities of tin.

The CHAIRMAN, who was received with applause, said: Gentlemen—It has always been to me a great pleasure to meet you at these four-monthly gatherings, but I am more than gratified on this occasion, because I have no doubt that many of you are in a state of considerable anxiety on account of the divers circumstances by which we are perplexed in the business world. During the last month or two we have looked in vain for a ray of hope in any direction, and what with strikes and rumours of wars, the silver question, and many other matters, the ordinary man has not known what to say or what to do. Gentlemen, I have no hesitation whatever in declaring to-day from this place that our troubles are almost entirely due to the unwise speculation which we have recently had the misfortune to witness in the market for foreign mining shares. (Hear, hear.) I say further that those parties who have rushed up quotations to such unreasonably inflated prices have done a mischief which will not be remedied for years to come. (Hear, hear.) In saying this I must not be understood to discredit foreign mining enterprise. On the contrary, there can be no question that the discovery of rich gold mines is a great advantage to our country and to the world; but we must carefully distinguish between a property, and the market value which it commands. A sovereign, good as it is, is only worth 20s., and a man would be an idiot who would give 22s. for it. So with mines. It is possible for a property most valuable in itself to be rushed up to three or four times the price which it ought to command. Gentlemen, I make these remarks the more fearlessly because this property of West Kitty, with which we have now to deal, has never in all its history been inflated in market value. (Applause.) I desire this morning to impress upon you again the fact that shares in West Kitty, upon which only 22s. each has been paid by the company, have had paid upon each of them in dividends the sum of £18 12s. within 13 years, and strange as it may appear, to-day these shares are only commanding a price of (say) £4 to £4 10s. each, notwithstanding the very large amount of tin ground opened up, ready to be taken away at the first substantial improvement that we may have in the tin market. Gentlemen, it is almost incredible that this mine at the present moment is selling at the rate of not much more than £24,000—(applause)—and it only shows how the Cornish mining industry has suffered by attention being diverted from it in favour of properties which have been selling, in some cases, for prices three or four times more than they ever ought to have commanded. (Hear, hear, and applause.) Now, gentlemen, there remarks, it may be urged, are not within the business limits of this meeting, but the circumstances are extraordinary, and altogether exceptional, and I think as Chairman of this very important company, it is time that Cornish mining should have a little more attention paid to it than has been the case recently—(hear, hear)—particularly as it is clear to my mind, at least, that there is no field in the future where so much money is likely to be made as by the successful tin producing companies of the county of Cornwall—(hear, hear)—and whilst foreign mining enterprise must command the best wishes of every thoughtful man, so long as it is not made the medium for reckless gambling, our home industry should, I think, appeal first to the ordinary English speculator. Now, gentlemen, what are our prospects as tin producers this day? You have it on the highest authority which no one will question, that the present state of the tin market is thoroughly sound. Another thing we are assured of is that consumption is overtaking supply, and further, I am assured that the immediate outlook of trade is bright with promise. I am not forgetful, gentlemen, of the fact that there are foreign complications in the political world; but, on the other hand, I remember that, fortunately for this country, foreign affairs have been taken out of the arena of Party politics—(hear, hear)—and with the eminent statesmen agreed on both sides as to our foreign policy, we have little to fear from any complications which may arise. (Applause.) I do not believe for a moment but that the great foreign question will be successfully solved by united effort and energy; and, gentlemen, if war has to be declared, judging from past experience, the home mining industry will benefit rather than otherwise as a consequence; so that I contend the investor in our home mines, supposing he does not give too much for his interest, is perfectly secure. (Applause.) I think the ground I thus occupy is unassailable, and that no one will venture to argue against my conclusions. The business of West Kitty has not caused the committee during the last four months the slightest anxiety. Everything has gone on remarkably well—with our cash system—and we hold to it that we will owe no one anything. The shareholder has been satisfied, and the committee have had no fear. We claim as a cash company to possess all the benefits of the Limited Liability system, with none of its drawbacks; but as to the expediency of converting a prosperous company like this into Limited Liability, the committee wish it to be understood that they keep an open mind. At the present moment, when tin is so low, the motto of the committee is "Economy," and that must be, and is the order of the day. Economy with efficiency much be rigidly observed in every department. Now, gentlemen, as to the future. You will see by the accounts that we have made a small loss of £170 9s. 8d. This has arisen entirely through our having had to expend a large amount for the dead work at Thomas's shaft. This work will soon be completed so far as the communication between the 60 west south of slide and the shaft is concerned. We shall then have splendid ventilation, and shall be able to take away our stuff south of the slide through Thomas's shaft with the greatest expedition and ease, and it must not be forgotten that we have splendid pumping machinery at this point, which can be utilised as soon as required. I have had a very important consultation with the officials in Cornwall, and they inform me that as soon as this work is completed they can see their way to increase the returns to the extent of 10 tons per month; that is instead of 26 tons, as at present, we shall be able to return 36 tons per month. (Applause.) With the present price of tin, which we may take, I think, to be the lowest we shall have—(indeed, I confidently look forward to a regular and upward tendency)—we shall be able to make a very fair profit; sufficient, at all events, to resume dividends on a moderate scale every four months; and, of course, if the mine, as is most probable, improves, as I believe it will, our dividend prospects may be considered as being very excellent. Meantime it is satisfactroy to note that there will be no call necessary to be made on the shareholders, and the small loss which may arise can be successfully met out of the large balance we now have in hand. Indeed, it is possible, and I hope probable, that we shall have to intrench but very little on this favourable balance at all. Now, turning to the agents' report, that will be supplemented by Mr. Michell, who has come up purposely to attend this meeting to-day, and he will tell you of the quantity of ground we have laid open at the 60 south of slide; but, gentlemen, mining is always full of surprises, and in West Kitty we have had a very agreeable surprise in the western ground north of the slide. There, I believe, we have a very valuable possession, as well as in the ground with which you are all so perfectly familiar, which is south of the slide. I might dwell much longer on the state of the mine itself, and on its future prospects, but I will not be tempted; suffice it to say that the committee has the fullest possible confidence, and that that confidence is shared by me as your Chairman. (Hear, hear.) Well, gentlemen, let us congratulate ourselves that strikes, bad trade, difficulties of one sort and another, are only temporary—they pass away, but the good fortune we meet with in such a mine as this abides, and those who receive dividends must be careful so to husband their resources as to lay up in store for such a time of depression as that from which we are now happily emerging. There is more than a silver lining to the cloud. The sun of prosperity seems to be about to break over us more forcefully than ever. Let us, therefore, go our way and be contented, because we are interested in such a safe and praiseworthy enterprise as that of West Kitty. (Applause.) The Chairman concluded by moving the adoption of the statement of account and the agents' report.

Mr. F. W. MICHELL said he had very great pleasure in seconding the motion. He was afraid to say how many years he had known Mr. Reynolds to preside over the meetings of the company, but he had never known him to be absent from a meeting of West Kitty, which was a very extraordinary record. (Applause.) The record of West Kitty itself was also very remarkable. It was a very exceptional thing to be able to say that a mine had paid cent. per cent. per annum on its capital during 14 years, which was the case with West Kitty. (Applause.) The mine was still in a very satisfactory condition. Large sections of tin ground had been laid open which they had no means of dealing with until they could get more stamp-heads running, and so increase their returns. A good deal of money had been laid out in dead work, and they were in a very good position all round at the mine. He hardly knew a mine in Cornwall that in respect to dead work was in so good a position as theirs. A large number of men were at work opening new ground and making new discoveries, both in the south section and in the northern, or old part of the mine. When they got down Thomas's shaft, and had communicated it with the crosscut, and ventilated that portion of the mine—which was a very necessary work, and would probably take some months to complete—they would be in a very excellent position; and he believed the future of West Kitty for the next 14 years would be quite as good as the past had been for a similar period.

Mr. G. BUDD, in supporting the resolution, said it gave him great pleasure to be present at the meeting, seeing that he had been associated with the mine for so long a period, not only in connection with the present company but in its earlier stages, for the mine might be said to have had several existences, though it had remained substantially the same under its different names. In the past they had had a variety of ups and downs—he had almost said gains and losses, for in the earlier history of the mine they had no dividends but plenty of calls. They had, however, survived all these vicissitudes, and those of the shareholders who did not turn shy but determined to stick to the mine had ultimately benefited by their resolution—(hear, hear)—and had been amply rewarded. The recent stagnation in the metal markets, and the consequent falling-off in dividends, had to a large extent been unexpected, and some persons might feel disappointed at the break in the payment of dividends. They had, however, dividends in prospect, and those people who lived a little longer would, no doubt, be able to congratulate themselves upon the return of more prosperous days. If the dividends did not quite reach the figure attained previously—viz., 10s. per share three times a year, they would be content with something less. In any case, it was satisfactory to know from the reports that there was every reasonable prospect of their being shortly rewarded by the resumption of dividends that would compensate for the stagnation they had had to encounter in the past. They ought not to be discouraged; it was only fair that they should share and sympathise with the difficulties of shareholders in other Cornish mines. If every other mine in the county was paying large dividends while they could not, there would be some reason for discouragement; but they were in as good a position as any mine in Cornwall, and he was glad to say that his fellow-committeemen in London were quite buoyant at the prospect before the company. In conclusion he could only express his continued confidence in the mine and his great satisfaction at the report which had been presented that morning. (Applause.)

Mr. W. M. LENNOX, in heartily supporting the motion before the meeting, said that there was very little left to be said upon that occasion after the fine address of the Chairman, supplemented by the remarks of Mr. Michell, who was the company's purser, and administered their affairs down at the mine, and the further observations of their old friend Mr. Budd. They were all satisfied with the report which had been presented to the meeting, and he could have wished that Mr. Michell might have dealt at greater length and more explicitly with the very wonderful discovery and development which had been made in the western part of the old mine. It was a discovery which Mr. Michell had been telling them for some years would be made, and now that it had been made it was a highly important and gratifying feature in the position of the company. He could have wished that Mr. Michell might have told them something more about the South Section, and what was being done there. Looking at the accounts from the business standpoint, he noticed that in regard to the large balance of £1191 standing in their favour at the last meeting, they had expended on the sinking of Thomas' shaft something like £170, and if they had been able to take this sum out of capital, which had been exhausted, there would have been a profit of something like 1s. per share remaining to divide among the shareholders. Now it should be remembered that in the course of a short time their expenditure on that shaft would be less while the tonnage produced would be increased by 10 tons a month which would largely increase their income. He told them frankly therefore, that his own opinion was that at the meeting after next they would be able to pay a very nice dividend. Their friends at the mine—at the head of whom was Mr. Michell—were doing their best to economise expenditure; and, assuming that they had no worse a price for tin than at present—and with the Chairman he was looking for a better one—he thought they might fairly look forward to a dividend at the time he had indicated. The shareholders would, no doubt, be cheered to know this. (Applause.)

Mr. J. J. GAIT said it was evident from the report that they were now really opening a new mine, and when it was remembered that they only paid something like £3000 for opening the new ground and sinking the shaft in the South Section there was every reason to believe that they had been doing and were still doing very satisfactory work. In this respect he believed the accounts would be very satisfactory to all the shareholders. The new works had not been carried out merely with the hope of discovering the lode, for they had had the lode with them for some time. (Hear, hear).

The motion for the adoption of the statement of accounts and the agents' report was then put and carried unanimously.

Mr. J. W. MORKILL moved:—

> That the best thanks of this meeting be and are hereby presented to the committee of management for their past services, and that the following do constitute such committee until the next general meeting of the company—viz., Messrs. G. Budd, J. J. Gait, W. M. Lennox, F. W. Michell, and John B. Reynolds.

In moving the resolution, Mr. MORKILL said he had listened to the eloquent and interesting speech of the Chairman with great pleasure. Mr. Reynolds had gone into detail respecting matters which were not only of great interest to their own shareholders, but also to shareholders in other Cornish mines. The assurance that economy was observed in the administration of the mine was a point with which he had been especially struck. Personally he had unbounded confidence in the ability and wisdom of the Chairman and members of the committee, and he was sure he was only giving expression to the general feeling of the shareholders when he said that they all felt they owed them a deep debt of gratitude for past favours and also in anticipation of those which were to come. Although at present they were not paying dividends, they had the sounder consolation of seeing the mine kept in a flourishing financial position, and if the committee continued to act upon this policy they would be in a better position to take advantage of any rise in the price of tin, or any other favourable circumstances which might arise. (Applause.)

Mr. E. W. MATTHEWS, in seconding the resolution, said he should be glad if the Chairman would give his opinion as to whether the company would be affected by the production of tin in the east.

Mr. ROBBINS supported the motion, saying that the shareholders were very much indebted to the committee for their exertions in the company's interest. The Chairman had stated that the committee would keep an open mind on the question of converting the company into a Limited Liability enterprise; but the shareholders must remember that a large number of Limited Liability companies were managed by guinea-pigs—(laughter)—and he hoped that if the conversion were made West Kitty would remain under the management of a committee. (Hear, hear.) It had struck him whether at the present price of tin it was worth while to take stuff out of the mine, seeing that, unlike the case with a commercial enterprise whose connection was always extending, the more that was taken out of a mine the less remained.

The vote of thanks to the committee was then put, and carried unanimously.

The CHAIRMAN, in acknowledging the vote on behalf of the committee and in reply to the criticisms and questions of the shareholders, said that in considering the present position of the company it must be remembered that the markets for all commodities had latterly been in a very depressed condition. They had just passed through a period of depression in the business world, which he supposed was unequalled, at all events within the memory of anybody present. The tin market had, of course, been no exception to this rule, but looking at it from a common-sense point of view there could be no reason whatever to suppose that the tin market would not recover in the future as it always had done in the past. He had passed through several periods of depression. He had known Cornish mines before in just as low water as they were at the present moment, and there was no doubt they would recover. The consumption of tin was likely to increase at such a rate as to entirely neutralise any increase in production. It was a well-known fact that West Kitty could raise tin at as cheap a rate probably as any other mine in Cornwall, because their workings were comparatively shallow. (Hear, hear.) It must also be remembered that the deposits in the mine were very rich, while, to his mind, though he could not, of course, see through the ground, it was not at all improbable that they were now entering into another rich deposit at the 60 west, north of the slide. The history of this point was rather an interesting one. They had formerly had a lode there worth £100 a fathom, but this cut out quickly, and the late manager, Captain Vivian, thought it was no use extending that level farther west. After Captain Vivian died, and remembering that it was only human to make mistakes, he (the Chairman) offered the first suggestion he had ever offered in his life as to the working of the mine, and this was that the 60 level west should be resumed. The agents concurred in this suggestion, as did also Mr. Michell, and the level was taken in hand again. When it was laid bare it was not worth a shilling a fathom. The lode was very small and exceedingly poor, but as they drove the

level it gradually improved and opened out until they got to a lode worth £20 per fathom. The drivage was continued, and now they had a capital lode in that end. Since the report before the meeting was written the lode in this end had considerably increased in size and had improved in appearance, and he should be surprised if it did not open out a big lode and become again as valuable as ever it was in Captain Vivian's time. As to taking away the tin in the mine it was a fact that during the last four months they had actually laid open more tin ground than had been taken away. Taking the different parts of the mine into consideration the only conclusion he could arrive at was that the mine would be at work and paying handsome dividends when most of those connected with the company were not in a position to appreciate them. The property had always been undervalued by those who were connected with it, and in the result its history had always been a history of surprises. (Applause.)

Mr. MICHELL concurred in the Chairman's view as to the probable duration of the mine, and said it would, no doubt, last beyond the lives of the committee.

The CHAIRMAN remarked that the returns would not be increased before the expiration of about four months. They expected soon to put on 10 extra heads of stamps. It was confidently hoped that they would be able to pay dividends in about eight months' time.

A vote of thanks to the Chairman terminated the proceedings.

WHEAL GRENVILLE MINING COMPANY.

A general meeting of the shareholders in this company was held at 7, Union-court, Old Broad-street, on Thursday last, Mr. R. W. GOOLD (Chairman of the company) presiding.

The SECRETARY (Mr. W. Stirling) read the notice of meeting.

The CHAIRMAN said: Gentlemen—I rise to move—"That the statements of accounts, together with the agent's report, be received and adopted." There is not very much that is new about the report with regard to the state of the mine. During the last six weeks that we are about to consider it certainly has not gone back. On the other hand, I think I may say that there is evidence in these accounts themselves that it has somewhat improved, but there is one point to which I should like to call attention, and I shall do so briefly. It is a point to which my friend, Mr. Lane, in my absence at a former meeting, alluded, and as to which I made some observations at the last meeting. It was with regard to the features in the working of the mine, where we expected a considerable improvement to take place, which would have a very decided bearing upon the present working of the mine, and also its future. I am very happy to tell you that both those features have come about as we thought they would. In the 248 fathom level, which is the deepest level we have at that point of the mine at Goold's shaft, we were cross cutting to find the lode, and at the last meeting had not quite succeeded, but expected to do so in a week or two. At the 246 fathom level in Fortescue's shaft there was another point that we hoped would come off successfully—namely, the drivage upon the level going westward to meet the level being driven at the 246. At that point also the event has come off in our favour. We have driven 40 to 50 fathoms eastward of Fortescue's shaft, upon the 246 fathom level, and have a very good lode there. (Hear, hear.) It is reported worth £25 a fathom there, and the lode at the 248 going east in Goold's shaft has also been cut. It was not cut rich, but having driven a few fathoms on it, it is now worth £8 a fathom, and is expected to improve daily. It would be almost impossible to exaggerate the importance of these two facts with regard to the future of the mine. I look upon it that our chances are great of having between those two points a long piece of very good ground, and for this reason, that in most of the levels above we had an increasing quantity of ground. The lode in going down seems to open out in extent in level after level, and for two or three levels we found the piece of really good ground eastward of Goold's shaft widening, and so in other cases. My hope, therefore, is that these two levels will open out a very large quantity of good ground, richer in all probability than anything we have had above. If you remember, six or nine months ago, when the shaft was carrying the whole lode at the 246 feet level at Fortescue's, it was reported to be worth, for the extent of the shaft, £50 or £60, and in one or two cases £100. The lode then left that shaft, and has only lately come back into it. Hence what we may open out in that lode going eastward of Fortescue's is a matter for conjecture at the present moment, but all the circumstances surrounding the place go to warrant the belief that we have richer ground there than we have yet had in Wheal Grenville, and that, therefore, there is something for us in that direction. (Cheers.) That is all I need tell you, and all I can tell you possibly, with regard to the mine, which we are working with just about the same power as before. We have 10 levels going, two of which are being driven by boring machinery. We have also nine stopes, which ought to have been 10, but one in the 178 has failed to yield any ore this quarter, and is not working. I have yet to find out the reason. You see there is not very much difference in our working to inform you about to-day. We are doing just about the same as we were doing the last time we met. The quarter has not been very delightful. This account is only made up to October 17. We have sold a large quantity of tin, and received a miserable price for it. Up to the date of this account we were getting £39, and less than that in one instance, during the quarter, but the average is £40—a very poor average indeed. I am not prepared to say very much about what tin may be in the future; I do not believe there is any man living who can, but I think the figures in our possession warrant the belief that the worst has passed, and that, altogether, the price is improving. I notice that in the first quarter of 1893 we were getting a standard of £91; in the same period of 1894 £75, and in 1895 £60 5s. In two years we have had a drop of £30 a ton. Now, according to the produce of our tin, we should have been getting £16, or £20 more than we have received, provided tin had remained at the same price, and I need not tell you what that would have meant to us. We are producing about 76 or 78 tons of tin a month, and £20 upon that means £1400 a month to the bad or to the good, as the case may be. Do not expect that we are going to make that up. If even we can get back to it by and bye it will be good enough, and I do not say we shall not. In the first two quarters of 1895 the price was only £60, and in the third quarter it jumped to £63 15s., and to-day and yesterday the price has been nearer £66 than £65, so that we are upon an ascending scale at present, and if it goes on we shall show you a better result next quarter than this. As regards the output of the mines, it remains very much the same as for two or three quarters past. We have been getting 77 tons, 75 tons, 76 tons, and 78 tons a month. We sold altogether during the past quarter 303 tons 19 cwts. 25 lbs., an average of 76 tons a month all but 1 cwt. We received for that tin £40 6s. 6d. per ton, against £40 1s. 2d. in the previous quarter—a difference of only 4s. a ton. The price of tin was practically the same as we were getting during the two months. On the other side, we spent on labour costs £6906 16s. 1d.; merchants' bills, £3799. Taking the latter item by itself it seems heavy, but you must remember the bulk of it is for coal, and you must remember also the character of the season we have passed through. For dues we paid £491 14s. 1d., and for all other charges £183 8s. 6d., making a total of £11,381 6s. 6d. As a matter of interest I have worked out what our cost per ton of tin has been during the quarter, and find that labour alone absorbed £21 6s. 8d. per ton; coals, and all other merchants' bills, £12 4s.; lords' dues, £1 12s. 5d.; and all other charges 12s. per ton; making a total of £37 7s. 8d. per ton; that deducted from what we receive leaves us with about £3 per ton profit—scarcely that. The total amount of our sales were £12,260 12s. 9d., our costs were £11,381 6s. 6d., leaving us £879 6s. 3d., as the net profit for the past quarter; and if anybody two years ago had told me that with tin at £60 a ton, and we getting £40, we could make a profit, I should not have credited the statement. It reflects great credit on the manager (Captain Bishop) and his agents, that they have been able to produce such a result out of such figures. (Cheers.) We had in favour of the mine at the beginning of the quarter £706 9s. 7d., and if you add that to the profit made, you get £1585 15s. 10d., and if you add to that again the sum in reserve—£334 2s. 11d.—you get a sum available of £1990 18s. 9d. Your committee, taking everything into account, have concluded that they can safely recommend you to divide 3s. a share to-day, which will absorb £900, and will then leave in hand available the reserve of £334, and the balance carried forward of £600, and with smaller items, £1019, in reserve, and we think, notwithstanding one or two items—unpleasant items that we may have to deal with, that sum will be abundant to keep in hand. We shall, therefore, ask you to keep the reserve where it is, and I may tell you it is in cash at your bankers, and to carry forward the remainder to the next balance-sheet. Reverting to merchants' bills, they are heavy, and in such a mine as this they must continue to be heavy. We have had notified to us lately that it would be imprudent to go on any longer without having two fresh boilers on the mine, in case they should be wanted, and we shall readily consent to that being done under certain conditions, because one of our first objects is to avoid risk if we possibly can. It has been so ever since we took the management, and to keep the mine in such a state of efficiency as that no sudden big contingency shall ever come upon us. Up to this time we have had remarkable success, and, therefore, are determined to pursue the same course in future. The two boilers will be provided, perhaps, immediately, and will probably not cost more than £400. We may be able to pay for one or both of them during the next quarter. I hope the rise in the price of tin will enable us to do that, and still leave us with £1000 in hand. I beg to move—"That the statement of accounts, together with the agent's report, be received and adopted."

Mr. F. G. LANE: I have great pleasure, as a member of the committee, in seconding the motion. I think our Chairman has shown you that the mine is not only looking very well indeed, but that it is improving as it is getting deeper, and, therefore, the future of Wheal Grenville is fully assured. The tin we have there and the tin we shall get (and we are only looking for a little better price) will enable us to give you what you thoroughly deserve, and that is good dividends. (Cheers.)

The motion was carried unanimously.

The CHAIRMAN: I have very much pleasure in moving that a dividend of 3s. per share be and is hereby declared, payable forthwith to the shareholders whose names stand upon the register of members this day.

Mr. GRAY: I desire to second the motion, because it gives me, as a shareholder, the opportunity of endorsing all that has fallen from you, sir, as to the admirable working of the mine, and the prudent policy which you have so consistently pursued. I note in what you were good enough to say to us that you avoided referring to the state of other mines in Cornwall, but taking an interest in this mine I naturally look to see what other mines are doing, and my experience is that, with the exception of Wheal Grenville, they are suffering to such an extent from the price of tin that the dividends have been discontinued even by those mines that in former times were very much better than Wheal Grenville then was. I second the motion with pleasure, and cordially endorse the policy which you have pursued.

The motion was carried unanimously.

Mr, TOUZEAU, in proposing a hearty vote of thanks to the Chairman and committee, congratulated Mr. Goold on his healthy appearance, and wished him many years of chairmanship over this successful mine. (Cheers.)

Mr. KITTO, in seconding the motion, said; It is not the first time I have had the pleasure of hearing Mr. Goold, and I am delighted to see him again. Like the last speaker, I, too, hope that he will be with us for a considerable time. We, who are accustomed to attend the meetings, know the interest he takes in our property, and how lucid are his speeches at every meeting. I am sure he is ably supported by his colleagues, Mr. Lane, Mr. Bellingham, and Mr. Gullick.

The motion was carried unanimously.

The CHAIRMAN, in returning thanks, said that since the last meeting we have lost the services of our valued friend, Mr. Dore. He resigned because he felt he was unable to devote the time to the work of the company it required. Looking about amongst our shareholders, it is always pleasant to work with a friend, and particularly when that friend is a man of business. We came to the conclusion that our friend, Mr. Gullick, was the man for us if we could succeed in getting him. I approached him with that view, and, to my gratification, he consented to act. (Cheers.) I am convinced we could not have hit upon a better man, and I am sure he will be as earnest in striving to forward your interests as any of your old committee have been. I am delighted to have him with us, and am sure it will be your pleasure to confirm his appointment by the following resolution:—"That the resolution passed by the committee, appointing Mr. J. W. Gullick a member of the committee, be confirmed by this meeting."

Mr. GRAY: I rise to second the motion, because I have known Mr. Gullick nearly as long as our Chairman. I have to thank him for introducing me to this mine—an introduction for which I have never had any other reason than to feel gratified. Mr. Gullick is a first-rate business man, and will do good service as a committee man.

The motion was carried unanimously.

Mr. GULLICK: I am extremely obliged to you, and can only say that I will do my best to continue the mine in the same successful way as in the past. (Cheers.)

The CHAIRMAN: I have to propose the usual resolution of sending the thanks of the meeting to the manager and his agents on the mine. I have so many times said that Captain Bishop richly deserves all the thanks we can give him, and he never deserved them more thoroughly than now, and during the troublous times we have been going through. How it is that he has been able to work the mine with such low costs as to enable us to pay dividends of 3s., with tin at its present price, I have not been able to discover, though I have given a large amount of attention to the figures. He must have introduced important economies. I feel great pleasure in proposing that "our best thanks be given to Captain Bishop and his agents, and the purser of the mine," for they have all had to share in the trial and difficulty there must have been to bring out the satisfactory figures we have before us to-day.

Mr. TOUZEAU seconded the motion, and said:—Captain Bishop is one of the finest miners Cornwall has produced. (Cheers.)

The motion was carried unanimously, and the proceedings terminated.

ST. JOHN DEL REY MINING COMPANY, LIMITED.

An extraordinary general meeting of shareholders in the St. John del Rey Gold Mining Company (Limited) was held yesterday, at the offices of the company, Finsbury House, Blomfield-street, E.C., for the purpose of considering, and, if thought fit, confirming a resolution passed at a previous meeting, authorising the increase of the capital by the creation of an additional 100,000 shares of £1 each.—Mr. F. TENDRON presided.

The CHAIRMAN, in moving the confirmation of the resolution, said he hoped that at the last meeting he had made it quite clear to the shareholders why it was advisable to take the step authorised by the resolution. He had showed that the figure was fully justified by the balance-sheet that had been brought up to February 28 of this year, and that though the 70 stamps, when started, were expected to provide a certain amount towards finishing the works, it was never supposed, unless the shareholders were to go for an indefinite period without dividends, that the whole of the money could be provided out of earnings. The purposes to which the money about to be raised by the new issue would be put might be briefly explained. In the first place it would be applied towards paying off the bonds falling due in January and July of 1896, amounting to about £40,000. Then the superintendent's drafts would be shortened from 90 days to 30 days, which, at the present rate of drawing, would take about £22,000. They must also recoup a portion of the profits earned from March 1 of this year to August 31 sufficient to pay interest on the company's engagements, and to provide a small dividend of 2 per cent., which, to a certain extent, had been promised to the shareholders for December. In regard to the last matter the board, of course, were in the shareholders' hands, but, if paid, the dividend would absorb £20,000. These sums amounted together to £82,000, and the board were also desirous of decreasing the company's indebtedness to Mr. Nicholson and to the men at the mine. These various matters having been provided for, some £10,000 would be left to purchase the stores Mr. Chalmers was constantly requiring, and which, in consequence of the bad state of transport from the port of debarkation, had to be kept in considerable quantities on the mine. One cause, in fact, of the lowness of the returns was that Mr. Chalmers, owing to a scarcity of timber, was debarred from working the eastern part of the mine.

Sir GEORGE HARRIS seconded the confirmation of the resolution, which was carried unanimously.

The CHAIRMAN subsequently stated that the issue had been very successful, the shareholders having supported the board most loyally. He also spoke of the discovery at the bottom of the No. 2 winze, close to the western end, of a thin line of mineral, containing galena, and which assayed 100 ounces of gold to the ton, and when concentrated by hand 1000 ounces to the ton. Unless the line of mineral were to widen out it would hardly be of a commercial value, but its existence encouraged them to hope for further discoveries.

A vote of thanks to the Chairman terminated the proceedings.

EAGLEHAWK CONSOLIDATED GOLD MINING COMPANY (LIMITED).—Mr. G. E. Keith, presiding at the first general meeting, held at Winchester House, on Monday, said the new company was registered on July 13. The lists closed on the 29th, and the whole of the shares were allotted on August 2, chiefly to shareholders in the old company. The reconstruction was a distinct success, and this he believed was due to the full subscription being made a certainty by the new capital being underwritten or guaranteed.—Passing on to give an exhaustive description of the property, the Chairman said that rich samples of ore had been discovered with a high percentage of gold. On September 7 the boiler at the battery burst and did considerable damage. An official inquiry was being held into the matter. Mr. Simon Jenkins had been appointed manager, and he had sent a very favourable report as to the condition and prospects of the mine. Their property, consisting of rather more than 48 acres, was partly in and partly adjoining the township of Maldon, Victoria, and close to a station on the Melbourne Railway. The main lode of the Tarrangower Gold Fields, a strong, well-defined permanent quartz lode, ran through their ground for 3339 feet. This was an unusually large holding for quartz mining, and the shallower workings of the property yielded about 1¼ million sterling. The mine was completely equipped with machinery and plant, and there were five shafts, of which two were of the first importance. They believed they had an excellent property.—A vote of thanks to the Chairman terminated the proceedings.

THE UNIVERSAL MINING DEVELOPMENT SYNDICATE (LIMITED).—The statutory general meeting of the Universal Mining Development Syndicate (Limited) was held on Thursday, at the offices of the syndicate, 79½, Gracechurch-street, E.C.—Mr. H. Dickinson, who presided in the absence of Colonel Willett, said: Gentlemen—As you are doubtless aware this is merely a formal meeting of the syndicate which has been called and is now being held in compliance with the Companies Acts, we do not propose at the present moment to lay any accounts before you, but we are pleased that you have an opportunity afforded by statute to meet us here and make such enquiries as you think fitting. As to the progress of the syndicate's affairs and the probability of its ultimate success, you are aware that the syndicate was formed for the purpose of purchasing and working mining properties in different parts of the world, and particularly in the Coolgardie District of Western Australia. Through the efforts of your directors this syndicate has since its formation been able to, and indeed has, acquired an extremely valuable property in the immediate neighbourhood of the Big Blow, Arizona, and Yellow Aster. The property acquired has been reported upon by several prominent mining engineers, and we have at present resident in London a gentleman of very high standing in his profession of mining engineer who has been able to report independently upon this property. In short, owing to the successful efforts of your directors, we have been able to achieve a point in what promises to be a very successful career for the syndicate. That point is this—viz., that we have been able to dispose of the property referred to on such terms that a powerful group of financiers have provided the whole of the cash purchase price of the property, and agreements have been prepared providing for the subscription of the working capital. The cash purchase has been paid to the original owners in return for the transfer of the property, and a communication has been received from the Bank of Adelaide to the effect that the title is correct. It is with every confidence in my capacity as Chairman of your directors that I am able to announce that unless some unforeseen and entirely unlooked for event happens, the shares of the purchasing company will in a very short time be at a handsome premium. It is highly probable that we shall shortly give the subscribers an opportunity for subscribing for farther shares with a view to taking over and developing certain other valuable contracts which are in course of negotiation, and I think it only right to state that it is in the opinion of the directors, distinctly their duty, to first of all offer an opportunity to the existing shareholders of taking farther shares before strangers are invited to enjoy the privileges of which they think the syndicate should have the first offer. Personally, I have little doubt that in a very short space of time it will become incumbent upon us to increase our capital, and on such lines as to justify our ultimately applying to the Stock Exchange for a quotation in our shares. With the success we have already achieved, and with the influence we have at our backs, and with the properties we have at our disposal, we are proud to think that we hold as high a position as any syndicate having for its object the promotion of this valuable industry of gold mining in West Australia. Mr. W. Bale having proposed a vote of thanks to the Chairman, which was seconded by Rev. W. Borrow and carried unanimously, the proceedings then terminated.—(Communicated.)

PHŒNIX UNITED.—At a meeting of the Phœnix United Mines' shareholders, held at Webb's Hotel, Liskeard, on Tuesday, the statement of accounts for the past 10 months since the company has been in liquidation showed a loss of £621 11s., which included cost of new boiler, pitwork and other extra expenses. It was resolved to continue operations for the next four months on the favourable prospects of the mine with every probability of paying costs and increased returns. The quantity of tin sold in the last three months was over 73 tons, and all from above the 100 fathom level.

NEWLANDS (WEST GRIQUALAND) DIAMOND MINES.—The adjourned general meeting was held on Tuesday, at Winchester House, Mr. Hermann Voss presiding.—The Chairman said that various causes had arisen which had delayed the holding of the meeting, one of which was that the illness of Mr. Justice Chitty prevented him giving his judgment. Before judgment was delivered, Mr. Trubenbach, at the request of the board, proceeded to the Cape, in order to endeavour to recover the mining leases, which the Government in South Africa had repeatedly refused, and he was glad to state that shortly after that gentleman's arrival in South Africa the directors learnt by cable that he had secured the leases for the company. Other difficulties arose with the freeholder of the farms on which their mines were situated. Ultimately, however, a new agreement was arranged in the form of a lease making over to the company the exclusive mineral (precious stones) rights covering that area, with which the board had every reason to be satisfied. According to this new arrangement the company, as under the old contract, remained under the obligation to find £25,000 working capital. Mr. Trubenbach had also succeeded in securing the requisite capital. They were now in a much more satisfactory position than they were last year. They had spent some money on machinery, the erection of which would be proceeded with in a few weeks, and from which he hoped in another 12 months they would be able to give the shareholders some substantial result on their mining operations.—The report was adopted.

MINING NOTES FROM JOHANNESBURG.

By H. BUSH, M.E.

Chimes West.

No. 1 incline shaft is down 260 feet, and No. 2 incline is down to 80 feet. The reef shows 6 feet, and assays 13 dwts. 6 grains. In No. 2 shaft it goes 3 feet, and gives 9 dwts. 9 grains. No. 1 vertical is down 93 feet going on a reef 3 feet wide, 14 dwts.

Driefontein Consolidated.

No. 1 vertical is down 245 feet, and the reef shows 30 inches, giving 2 ounces 7 dwts. Very rich assays are being obtained from the reefs, which average 3 feet in width. This will be a very big mine, and the shares are a splendid investment.

Angelo Mines.

East drift 513 feet from crosscut exposing a reef of 36 inches, 14 dwts.

Spes Bona.

On this property the shaft is going to the fifth level, and will arrive in about two months. The opening up of No. 4 level shows good ore. The main reef is 1½ foot. They are still looking for the south reef.—At this No. 4 level crosscutting is being done to find the north reef. Forty stamps and cyanide plant with two vats doubled will be ready by March, 1896, and cyanide will be direct from the mill. The stamps are to be of a heavy type, by Fraser and Chalmers, 1050 heads. There are 60,000 tons of ore in sight, and the opening up of the property gives 8000 tons per month. The Main reef leader has been opened up 40 feet. Concentrates are to be treated separately. All rock is to be sorted, and a dam is in course of erection, capable of holding from 2,000,000 to 3,000,000 gallons of water. The rock sorted will give 7 to 8 dwts., and tailings 4 dwts. Mr. Johnstone is to be congratulated upon the persistent and clearheaded work that he has done upon the property.

Princess Estate Gold Mining Company.

This property is entering into a new era. There are to be new surface works with a central installation. Steaming plant and all demands will be supplied by electrical transmission. The battery in course of erection will be 30 stamps, 1200 heads, by Krupp Grusonwerk, and will be erected in batteries of five, so giving stability to the whole show. It is expected shortly that another 10 stamps will be added, since the exploration of the Main reef gives good crushing. The crushing with the new 30 stamps will give 4000 tons per month, the old stamps still running giving 2600. It may be safely said, therefore, that the working costs will materially be reduced as soon as the new works are in operation. On the eastern part of the property, driving has been done at 450 feet, showing ore of high grade. The shaft is down to 550 feet, and drifting started. On the western portion of the property the shaft is down 450 feet, and at the 350 level this section has been driven up to the big fault. The reef here is also of good grade, but not so good as in the eastern section. Since the erection of the compressor plant, 30,000 tons of ore are in sight; with the completion, which means 20 drills, naturally the work will be implicated. The property consists of 140 claims, and a mynpacht, and the estate. The water supply of the company is so great that it is able to supply adjoining companies from which it derives a good revenue. A feature here is that a new arrangement is in operation, to keep sand from the battery by the formation of pits with drainage bottoms. The same idea is in operation on the Durban-Roodepoort; on this mine the idea has been improved upon.

Balkis Eersteling.

In the Marabastard district, 20 miles south of Pietersburg. This property has been run for years. The farm has an area of 4 miles, upon which are two good reefs going from 2½ to 3 feet. An adit has been opened up for 800 feet, and the deeper the reef is found the better it goes. It is blue pyritic, showing visible gold, and it has been traced east and west for 1000 yards. There is a dyke here which cuts across the reef, but the reef has been exposed on the other side. At present only a 10 stamp mill is at work; later on work on a larger scale will be undertaken. Messrs. Barnato and W. Knight are in this show. Besides quartz, there is alluvial. The schists run through the property, and dip under the quartz under Drakensburg. Mr. Henderson, of the Oceana Company, controls the whole line from Kroomdraal to Pretoria.

Gordon Diamonds.

These mines are at Kimberley; capital £150,000, shares 30s., paying 2 per cent. per month. This will be increased to 3 per cent.

East Rand Proprietary.

Having proved the eastern section of these claims, it is the intention to float the East Rand Extension. It is also the intention to float two other companies. These shares will again have a sensational rise, and they should be watched.

INVICTA GOLD MINING, LIMITED (BRITISH COLUMBIA).—The statutory meeting of the Invicta Gold Mining Company (Limited) was held this week at the offices of the company, Old Broad street, Edward Rawlings, Chairman of the company, presiding.—The Chairman stated that the necessary working capital had been privately subscribed, the vendors taking the whole of the purchase price in fully paid-up shares. He also stated that the transfer of the property would be completed shortly. The directors had engaged a competent person to proceed to the mine to take over the property. One of the directors, being at the present time in America, had been requested to engage a first-class hydraulic engineer, and it was expected that this appointment would very shortly be made. The Chairman spoke sanguinely as to the prospects of the company, and looked confidently forward to handsome profits being made.

THE ALUMINIUM COMPANY (LIMITED).—An ordinary general meeting of shareholders in the Aluminium Company (Limited) was held on Monday, at the Cannon-street Hotel.—Mr. Gerald W. Balfour, who presided, in moving the adoption of the report and accounts, which recommended the payment of a dividend of 5 per cent. for the year on the A shares, leaving £2376 to be carried forward, said there was not much to report in the ordinary business of the company's working in the past year. The gross profits amounted to about £17,000, as against £19,500 in the previous year. The difference was owing to a stagnation in the sodium trade, due to a very special cause which was not likely to recur. The chief interest in the report, however, was the development value of the company's patents during the year. He went on to say that they proposed to pay off a portion of their debenture debt. That they would be able to do out of the profits of the sale of patents, and in the future they anticipated that the company would be in the enjoyment of revenue, not merely from the profitable business which it was at present carrying on, but also from other sources, viz.: The dividends on the shares of the Caestner-Kellnerr Alkali Company; the royalties to be paid by the Mathieson Alkali Company; the dividends on the share capital to be allotted to this company of the American Company now being formed; and the sale or other arrangements in reference to British and Continental patents, in respect of which negotiations were proceeding. The company was now in a better position than ever, because they had not got all their eggs in one basket.—Sir Henry Roscoe seconded the report, which was adopted.

CORRESPONDENCE.

*** We wish it to be understood that we do not hold ourselves responsible for, and do not necessarily endorse, the opinions of correspondents. All communications must be accompanied by the names and addresses of the senders, though these need not necessarily be published.*

THE ROYAL SCHOOL OF MINES.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—The eccentric treatment of Pyrenean geology by Don Juan Macveigh, in *The Mining Journal* of 9th inst., touches questions of general interest in a readable form. The novelties in the interpretation of the Pyrenees which I had contributed to your pages will be printed in a few days by the French Geological Society, and both that society and the French Academy have scrupulously afforded me every facility for expressing my views. In France, as in England, I have no quarrel with men of science, but only with a few officials who persistently adulated the men whose shoes they occupy, until by this means they gained the power to ridicule their lines and obliterate their work. Chosen over the heads of older officials, who preferred duty to perpetual scribbling, the men in question are more sensitive to criticism than the average unprofessional man of letters. In France they are mainly remarkable for the cordiality of their relations with their South Kensington compeers, and wild hopes of effecting the boring of the Channel Tunnel, or the transference of the Naval Colleges to Kensington, brighten the gloomy prospects of the chief abettors of the Panama.

In England my attempts to contribute even a signed letter to a scientific journal have been met by prompt rejection, and when I have journeyed from the Pyrenees to the British Association, the hour of meeting has been altered without notice, and myself and all similar outsiders have been informed that the meeting of section was suspended in consequence of both audience and authors having waited till the fixed usual hour. The explanation afforded me by the leading geologist was that "the British Association is not intended to bring new observations, but men's names before the public." The names of the old students of the Royal School of Mines are peculiarly distasteful to those enjoying the sinecures created by its confiscation. Professors Huxley and Frankland obtained an endowment amounting to £3459 per annum, and the secretary of the Royal Commission that carried out their wishes obtained £800 per annum for delivering twelve lectures on Astronomy, every student being compelled to contribute £5 towards this startling superfluity. By ostracising and silencing those who trusted to the violated promises of Prince Albert, and the very men who introduced real technical education in England, and completed it in Germany, it is hoped that the history of its conversion into popular lecturing may be buried in their submission or death. Meanwhile, the peculiar diction of the late Dean of the Huxley College afforded a model to his forces for the assault on University funds. In describing the "Spiritual world" as a "forecastle yarn," and the Incarnation as a case of "virgin procreation, not only clearly imaginable, but recognised by modern biology as an every-day occurrence among some groups of animals," he enabled his supporters to reject, on the ground of acrimony, all attempts to expose the worthless references which he snatched from unread books. Struck with the reckless assertion of a theory attributing the dark element in the English race to a Basque origin, I once ventured to adduce carefully collected evidence that the Basques are notably lighter than the races which surround them. I was hastily informed that I had completely misrepresented my opponent. I believe that the theory still holds its place, and I am informed that "his contributions to ethnology rank foremost both among his own writings and those of their class." In palæontology he "did not care for fossils," but employed its emoluments and authority to teach the unscientific and unproved aspects of Darwinism to working men. In destroying the School of Mines to found a new school of biology in opposition to the superabundant endowments of that subject in the medical schools and universities, he secured that leisure for unlimited literary production, which appears to be the present accepted meaning of the most highly-paid and responsible scientific posts. The little manuals forced on every schoolboy by the South Kensington authorities are the gold mine of the endowment of research.

While the British Association trembled under Professor Huxley, and its funds were distributed among the richest men of his acquaintance, an Edwards and a Dick were left to starve, and working men who attempted to read papers were hustled into silence and ridiculed with petty malignity. Those, on the other hand, who chose our first technical college as a substitute for another *alma mater*, find its library pillaged, its classes abolished, its laboratories suppressed, and the address and meeting-place explicitly guaranteed to them by Prince Albert and his advisers made over to the members of the mining profession, who were sufficiently practical to regard Government education as a farce. A *post facto* notice informs them "alteration will give no right to compensation." They are regarded abroad as impostors hailing from a non-existent institution. Almanacks and directories name only a duplication of the Royal College of Science, long known in Dublin. The scientific Press is in the hands of the most deeply-interested sinecurists of the Endowment of Research. Writers who, like the late Richard Proctor, knew something of what I have seen and experienced, could find no words clear enough for their opinion. The protests of Murchison, Ramsay, Warrington-Smyth, Percy, Hunt, and all entitled to speak, are buried in Bluebooks stated to be out of print, but of which copies are before me. While the abolished Jermyn-street institution has formed the model for the Berlin School of Mines—the Huxley College, its syllabus, and its prohibitive fees resemble nothing in any civilised country. The failure of technical education, the loss of place in all our industries, follows naturally the confiscation of our first experiment by biologists, astronomers, and laboratory geologists.

By the men in question the interests of technical education have been purposely identified with sentiments and practices which it is the first duty of every University and every educated man to resist. It is not merely every existing form of religion that is, as the Dean specially impressed upon his students, "the deadliest enemy of science" What he understood as science has many equally deadly foes. "As Rastignac in the Père Goriot says to Paris, I said to London, '*A nous deux*,'" is the text of his last sermon to boys. To the class of students he attracted and trained to propagate "the new reformation" his summary of the aphorism of Descartes as a faulty syllogism would appear profound. They would not know that the celebrated Letters of Descartes describe this blunder as the worst device of the Huxleys of his day.

The details of the abolition of the School of Mines, of the unblushing assertion and verbal quibbles that obtained a change on the promptly violated assurance that its existence and efficiency would be "in no way interfered with," are simply what was to be expected. Laboratory geology, *kinder-garten* mining, elementary mathematics, free-hand drawing, a mechanic's degree without higher mathematics, and second-class degrees to discredit those of the old school are the most significant innovations. Once admitting a popular biologist as Dean of a School of Mines, all mere absurdities become trivial. The theory that its founders were foolish and its teaching inadequate were necessary details of the job.

Whether the reincorporation of the School of Mines with the Geological Survey and Museum of Practical Geology, to which a city School of Mines is an inseparable adjunct in all civilised countries, is accomplished by private subscription or the public Press, it is rendered daily more inevitable by universal experience and the specialisation of every science. The Survey, if permanently divorced from mining men and interests, will not only lose its place in Europe, but will inevitably become the prey of mere theorists and literary triflers, absolutely unfitted to fulfil the explicit purposes of its foundation.

The most competent of our mining men, known in all countries by his standard manual of the subject, has the misfortune to be an old student of the School of Mines, and to be respected by the mining profession. Inevitably the new Dean of the Huxley College has been chosen from those who plotted the destruction, villified the teaching, and were exposed by the chief and colleagues among whom they had been recently admitted. In this manner the existence and efficiency of the "absorbed" school has been "in no way interfered with," and the prospects of technical education are systematically sacrificed in accordance with the endowment of research.—Yours faithfully,

P. W. STUART-MENTEATH.

GEOLOGICAL FORMATION OF COAL IN THE PYRENEES.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—What a wonderful geological phenomenon is coal, theoretically; so strange, indeed, that, but for the practical discovery of its existence, to which geognosy leads, the coal measures would be a section of the cosmos buried in chaos.

As geognosy is the *nascitur non fit*, which has given the great practical results of the coal mines to Great Britain, people on the Continent are beginning to so apply it, that before many years other nations, besides supplying their own wants, may not only supply the markets to which we export, but also deliver coal to the English seaports. Such facts, becoming sensibly visible, will enable geognosy to force geology to admit the logical necessity into its formulas and disquisitions, because its disappointments are so superlative that neither capitalists nor Government contractors will much longer rely upon mere geometrical outlines for the responsible progress of popular power.

Geology has, from the carboniferous issues, discovered too many theoretical primary elements in contradiction of the coal formation which chemistry has resolved into the one essential of vegetable carbon. At one period, whether through the successive epochs of seed generating stamina, or not, from the pre-adamite age, this vegetable matter was the vulgar timber of the great glacial period whose transportation located the flora in the subterranean deluge passages, or from thence raised them up to the summit of Ararat, then the highest elevation of the cosmos. Geognosy, in its humble ignorance, has to rely for a knowledge of the same upon the correctness of the geological sections. But as many important data of this sacred history have not been collected, and as the relics which have come to hand from such disturbing causes still require a much more reasonable classification, geognosy must be without reliable assistance till that is effected in the School of Mines.

From the famous evidence of the most eminent coal authorities, examined on oath, it seems that the material substance of coal is still open to question. One may, therefore, inquire what coal is? and how it came to be confined so exclusively to some places, as geology teaches?

Geognosy recognises that trees and vegetable matter grow upon all kinds of rocks, although not indifferently. When dead, however, and decomposition has set in, there is an absolute indifference, except where specific affinities or magnetic attractions exercise their energies. Carbon and iron are so nearly related in their affinities as to be contiguous in place, and of such mutual help in results as to be companions in the same carboniferous bed. And if so closely related that where coal exists iron also exists, may it not also be that where iron exists coal may also be found in the same deposit, although *vice versa* may be a natural inversion in geology?

Observation displays the importance of insects in forming mole-hills and great dykes, &c., and geology acknowledges its obligations to the Belmonites, &c., as the Tyndal inside builders of the subterranean passages, internal inclusions and cavities into which they were washed from the pre-anterior glacial rocks on the fourth day, by the appearance of the sun, or the super-igneous system of avalanches, which carried the timber and flora on the rafts and reefs of the dilemma, to the great carboniferous ocean bed, where they would have remained in the *quietus* of the subsidence and repose so necessary for the coal formation, but for the internal fizzing of the saturated steam evolved by the contact of the glacial and igneous theories. But although Tyndal has shown how from the smouldering detritus emanated the bird with its variegated plumage, without the necessary egg, and how the atmospheric agencies taught that bird to sing so sweetly in the harmonious concert of Nature, geognosy does not admit the theory in the formation of the coal.

All this may be as easy and clear to geology as the light and heat of the carbon of the noonday rays, but geognosy cannot see the coal through the fog of and around the glacial system, nor give it practical application.

Whether the geognost goes to the north, south, east, or west of the Cosmos, and through valleys and forests reaches the greatest accessible elevations, he observes that every range of mountains has great rapid streams and cascades, whose waters plunge into enormous fissures, and into which they carry the localised vegetable decay or débris. And from what he sees realised he is puzzled to know how such a wide-spread surface distribution of flora or the vegetable substance of coal was carried to Wales, whether upon the glacial sections or by deluge transportation, if not transformed *in situ*. Being unable to understand from the modern records the unknown past phenomena, the geognost must grope around the tangible of experiment, while geology does not make the coal formation, and especially its position, more clear.

Only those interested in the coal mines of Wales can clearly understand how all the flora of the world, before and since the Deluge, was drifted into Wales, and so deeply deposited there as the one only and universal deposit of the Cosmos. Geognosy is operating already against this credo.

Against this very extensive local sections of geology, foreign geognosy is asserting such a *de facto* opposition as to very soon bring geology into discredit as a guide unless it can explain in a more satisfactory way not only how the flora could have made its way, whether by overland route, subterraneous fissures and passages, so full of intrusions, dykes, and obstructions to Wales, but to have so arranged itself in "place" as found.

Further against this monstrous anomaly is the great geological

secula saeculorum of Huxley, during which period more flora had been produced than all the known mines of Wales could contain, so that there must be, therefore, some of the enormous production of that vegetable decomposition elsewhere; and if only a percentage of the admitted 20,000,000 of fossiliferous years, the geognosts of other nations may discover ample supply against our exports, unless geology permits of working in other sections.

Considering the modern action of Nature respecting the flora, the geognost remarks that the fall of the leaf brings floods to carry away the decomposition matter of the harvests, together with storms in the atmosphere to suppress putrifaction.

He sees none of the yearly aggregations of flora left behind on the surface of sowing and reaping, all being carried off or utilised for next year's growth. Therefore, he cannot recognise that the dead flora which he sees carried off by the nearest mountain stream and fissures, of whatever kind of rock upon which grown, or which he sees floating in a mixed mass down the rapid current, is making its way directly or indirectly to the Wales deposits.

Geology must turn over to the new section, upon which it will find geognosy prospecting to ascertain whether coal should not exist in any kind of rocks containing decomposed shale elements, mixed with vegetable decomposed matter; and, after a little more of practical investigation, assuredly it will be recognised by geognosy that, if vegetable matter decays where it has grown, that where large forests covered the surface for thousands of years, or unknown periods, coal exists underground—and, *ergo*, coal dependent upon vegetable matter exists where that matter exists, independently of the nomenclature of the rock.—Yours faithfully, JUAN MACVEIGH.

ASSAYING AT THE ROYAL SAXON SCHOOL OF MINES.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—Mr. Ball is incorrect in stating that he came to Freiberg with a knowledge of the German language. Mr. Ball, perhaps, knew some few words of German, but he was quite unable to make himself understood to me, and I am, therefore, justified in stating that Mr. Ball knew no German. All those that knew him can testify to the authenticity of this statement.

Mr. Ball is again in error in stating to have merely said that the appliances were few. He remarked thereof that they were few and antiquated, and that, to my way of thinking, means insufficient. The expression "few and antiquated" were directed, so it seems, towards the furnaces; for I am sure that your correspondent would not have the readers of *The Mining Journal* to believe that the apparatus for wet volumetric and electrolytic tests are "few and antiquated." Every student has his own beakers, dishes, burettes, pipettes, platinum-electrodes, &c.

Mr. Ball further mis-states the number of furnaces. In his first account of these he forgets the charcoal and gas muffle furnace. He says most distinctly: "The appliances are few and antiquated. There are but three muffle furnaces, &c." It seems to me that he purposely forgets to mention the two small furnaces to lend weight to his expression, "few and antiquated." That Mr. Ball does mention the existence of these furnaces later in his article—I have noticed whether the Plattner furnaces be antiquated or not—is absolutely of no importance, as they answer their purpose excellently, and hold, I may add, with ease 20 Freiberg crucibles (Tuten).

I repeat your correspondent gives the readers of *The Mining Journal* an entirely false picture of the practical assaying, when he disconnects the same from the lectures dealing with it, as also with the lectures and practical work on the metallurgical course. I would have it clearly understood that those, taking the full metallurgical course, do learn both sampling and the preparation of standard solutions.

Practical assaying is only one part of the metallurgical course. This fact Mr. Ball should not have omitted to lay before your readers, but I take it that on account of his premature departure from Freiberg, and his scanty knowledge of language, he was unable to correctly inform himself as to the ordinary course taken by our students.

Whether it be possible, at the end of the course of volumetric analysis, to perform an iodide copper assay through a mere lecture description, I leave to your readers. If it were, however, not the case, then it seems to me that a chemist or assayer could not possibly carry out a newly-adopted test that had come to his knowledge by a mere reading.

As to the kind of assays and as to the methods of teaching, which are best to adopt is a matter of opinion.

Experience has taught us here that students, by our method of teaching, are fully capable of carrying out independent investigation.

In conclusion, I wish to remark that your correspondent professes only to have spoken as regards the practical assaying. But in both his article of September 28 and his letter of October 26 he expresses, indirectly and directly, his opinion on the Freiberg Academy in general. Whether the opinion of your correspondent, who, as already mentioned, knew very little of the German language, and only took up a very small portion of both the practical work and the lectures taught here is, to be relied upon, is a matter which I leave to the judgment of more competent professionals.—Yours very truly,

DR. PHIL. FRIED. KOLLBECK,
Assistant Instructor of Assaying.

Freiberg (Sachsen), November 12.

VICTORIAN GOLD MINES.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—At the meeting of the Southern New Chum Company, Bendigo, Mr. Louis A. Samuel is reported to have said, after reference to the Transvaal and West Australian booms, that Victorian mines had no champion here, and, therefore, English capitalists had neglected them. In my humble way I have endeavoured to champion Victorian gold mining long before, and since, the Transvaal or West Australian mining had obtained so much importance. I also advocated the more extensive development of gold mining in Victoria while living there so many years, especially the deeper developments of the Bendigo quartz reefs over 20 years ago, and which has since proved by actual work that my prognostications were correct at the time. The mining men of Bendigo did not respond to my efforts to reform the system of mining that existed in the early seventies, that would have much more quickly and more profitably affected their interests.

However, I am glad to see they are getting alive to the importance of having more capital to assist in the development of their vast resources.

I have, as you know, for many years persistently kept the value of Victorian gold mining to the front through the columns of your Journal and other papers, besides in my work on "Our Gold Supply," lectures, &c. The Victorian colonists have much neglected the magnificent gold resources they have at command, and neglected opportunities to bring their mining resources more prominently to the front, especially during the time of the Colonial Exhibition, in 1886, when the best opportunity the colony over had of making a special display of its resources was missed by the apathy of the Agent-General, Mr. R. Murray-Smith, who refused to co-operate with other representatives in making a grand display of Australia's mineral wealth as I had proposed, and arranged to carry out, if the co-operation I invited had been given as it should have been. I then appealed to Mr. George Lansell, of Bendigo, and other Victorians, who were living here then, but they also would not help in the organisation of the scheme. Thus Victoria lost a special opportunity of having its great auriferous resources made prominently known. Queensland took advantage of the indifference of the other colonies, and partially carried out my proposal, with good results to the mining interests of the colony.

I again repeat that if the Victorians want their colony to prosper more quickly they must arouse themselves from their apathy, and give more attention to their gold mining resources. The output of gold from these can be doubled or trebled in a few years if capital be but judiciously invested in legitimate mining. I know of ground enough lying idle to put more than double the number of miners now employed into profitable work. The output of gold could be easily raised to £10,000 annually if mining was carried on as it should be.—Yours, &c.,

THOMAS CORNISH, M.E.

THE WARATAH GOLD MINES, LIMITED,
CROYDON, NORTH QUEENSLAND.

THE following circular has been issued to the shareholders, dated 43, Threadneedle-street, London, E.C., November 11, 1895:—Dear Sir,—I am instructed by the directors of this company to send you the enclosed extracts from the general manager's letters and the mine manager's reports. The directors take this opportunity of congratulating the shareholders on the eminently satisfactory developments of the mine. It will be seen by the reports herewith that the whole of the ore now being raised averages in money value about £20 per ton. In consequence of the ore containing a large proportion of silver, it is considered advisable to ship a bulk quantity to London for treatment, and a consignment of 131 tons of ore, worth considerably over £2000 is now in transit, and should arrive in this country during the current month. At the present moment there are no adequate means of treating this ore to the best advantage on the Croyden gold field. Your directors have obtained the best advice on this subject from gentlemen of large practical experience, and they intend to have the ore now in transit thoroughly tested and treated in this country before determining the class of machinery to be erected. There is little doubt but that the ore can be treated at a very small cost, and at least 90 per cent can be saved of the gold and silver contained therein. When the tests are completed a suitable plant will be erected on the mine within a few months.

The mine is already equipped with a 30 horse-power hauling engine and pumping machinery at a cost of over £3000, with a hoisting capacity equal to a large output. It will be seen from the reports that the underlie shaft has been carried down 300 feet, and that levels have been driven north and south, disclosing payable reefs of highly mineralised ore. The manager is sinking the underlie shaft vigorously, and everything points to the fact that the deeper the shaft is sunk the better the quality of the ore. The company is in a strong financial position, having about £8000 of the £15,000 working capital intact. The railway from the port of Normanton to Croydon (the station of which is situated within ½ mile from the mine) offers great facilities for working the mine to the best advantage.

Cablegram received from manager at Croydon, October 31, 1895:—"Good ore still continuing in stopes over south level. Struck a rich body of ore in No. 2 north level."—A. B. Beeston, secretary.

Extracts from the Mine Manager's Reports.

May 10: "The underlie shaft is down 246 feet. I am pleased to be able to report a change for the better in your mine. I consider you have by far one of the best properties on Croydon. There is a well-defined reef about 15 inches thick in the sink showing gold freely. The stone assayed gives 2 ounces 4 dwts. 12 grains gold at £4 4s. 11d. per ounce, and 65 ounces 6 dwts. 16 grains of silver per ton of 2240 lbs. This sample has been taken from all parts of the reef. The stone we are now raising will exceed that by far in richness. I recommend that all stone be sent to England for treatment, as the ordinary local gold batteries are unable to do justice to the stone, and means great loss to the company, whilst with better facilities you would know exactly what your mine is worth. It is my intention after sinking the shaft another 20 feet to start driving levels north and south, which will give about 60 feet of backs to work on. After the levels are driven about 20 feet to put two shifts sinking in the shaft, by which means dead work would be going on simultaneously with raising payable stone, at the same time further proving the value of the property. After the ground gets opened up and continues to be good, I would strongly recommend the directors to erect smelting works or machinery capable of treating the stone on the ground, as there is a good supply of water coming from the mine capable of sustaining a battery or other purposes."

June 7: "There is a change in the sink for the better. Barren quartz which has been underlying the gold bearing stone has cut out, and a nice plumbago formation has come in. In future, I shall be able to make greater progress in sinking the shaft. The reef continues to look well in the sink, and I anticipate before long that we shall meet with a larger body of stone richer in quality."

July 20: "The south level is now in 31 feet from the shaft. In the south level the reef is 6 inches thick of very good quality, and in the stopes the reef is 14 inches thick. In the north level the reef is about 6 inches thick of fair quality, with about 12 inches of good quality stone in the stopes. I have erected and completed a new brace which is more convenient for working. The reef in the sink is about 8 inches thick. A small reef has come in on the footwall carrying good gold which promises to join the ore previously mentioned."

August 3: "Since my last report there has been a great change for the better in connection with your mine, the reef is opening out larger, and very much richer. In the south level the reef averages about 16 inches over the stope, and 8 inches of very rich stone in the face of the drive, which I estimate to be worth £30 per ton. I consider the time has now arrived when the mine will pay working expenses and a good dividend every month, providing the stone is sent away for treatment. The shaft is now down 281 feet 6 inches. The reef in the sink is small at present, but of very good quality. The men are now working in the south level following up the good stone."

"August 17: Sank the underlie shaft a further depth of 15 feet 6 inches, making a total depth of the shaft 295 feet on the underlie. There is about 3 feet of formation on the footwall with quartz leaders running into it. I expect to meet with a good body of stone shortly. Since my last report the reef in the south stope has very much improved. It is about 2 feet thick all along the face, and in one place it is about 4 feet thick of good quality stone. South drive has been extended 13 feet for the fortnight. Distance from the shaft, 52 feet. The reef in the face of this drive is 8 inches thick of good stone. There has been 38 tons of stone hauled for the fortnight."

Extracts from the general manager's report.

May 10.—Cable; "Struck rich body of ore in sink. Assay value £19 per ton. Manager strongly recommends increasing the number of men employed. There seems every prospect of good results. In reference to the strike I am pleased to say it puts a bright prospect on your property. It is the first mundic stone struck, and is wonderfully rich. The reef is about 15 inches and well defined. After a long conversation with the manager I have decided to ship 100 tons direct to you as the milling plants here could not save one-third of the mineral. If you can get 75 per cent. of the contents the mine will pay splendidly."

July 1.—Cable; "Depth 270 feet. Stopes 12 feet north and south reef 19 inches. Value £20 per ton. 100 tons ready shipment. Prospects are encouraging. Assay from 260 feet level—gold, 2 ounces 13 dwts. 2 grains; silver, 101 ounces 9 dwts. 10 grains."

July 12.—"The manager is pushing ahead as fast as possible, and is taking great interest in your property. The levels are looking well, as they continue, and the output will be considerable during the next few months."

August 4.—Cable: "Taken up additional ground, Struck splendid stone south level. Assay £23 per ton."

"This stone is undoubtedly good, and since cabling has improved in driving. On Friday the manager sent in for me as he had struck something exceptionally good, and I have now in my office a piece of stone weighing about 20 lbs. which must be worth over £100 per ton. The gold and silver is through and through it, and I am pleased to say there is plenty more of the same sort. While I was below I watched the men break and send up a truck of this stone. The reef averages 12 inches, and appears to be making. I am of the same opinion as the manager, viz.:—That with proper treatment the stone is worth £20 per ton."

Assay—T. D. Kellaway, Croydon:

August 1.....	Gold ...	2 ounces 8 dwts. 16 grains.
	Silver ...	80 ounces 4 dwts. 5 grains.

Assay—Weston and Co., Croydon:

August 1.....	Gold ...	2 ounces 9 dwts. 0 grains.
	Silver ...	98 ounces 9 dwts. 19 grains.

Note.—Gold in each case is valued at £4 4s. 11d. per ounce, and the above assays represent per ton of 2240 lbs.

August 19.—"We have now at grass about 140 tons, assay value about £20 per ton. The new make of stone in the south drive is really first class, and should it continue will make the mine."

22nd August, 1895:—"I have instructed a surveyor to make out a complete plan of the property, which will be ready in a few days."

Retreatment of Ore.—"I am getting Mr. Isaacstatter (late assayer to the Mount Morgan Company) to give me his opinion on the matter. Owing to the large quantity of silver contained in the stone I am led to believe that cyanide will not extract 50 per cent. of the contents."

Reshipment.—"As it would be wanton waste to treat the ore at local mills and the 100 tons already bagged and in Normanton, I am sending it on. This, I am sure, you will not regret, as I will point out my reasons for so doing. In our last assay the contents were:—

Gold, 2 ounces 9 dwts. 6 grains per ton ...	£9 16 0
Silver, 101 ounces	13 17 9
	£23 13 9

"Now, by local treatment as shown time after time, we would not get 50 per cent. of the contents. And as it is impossible to save the tailings at a public mill this would be a complete loss. Then again the banks only allow 1s. 2d. for silver and the assay 6d. per ounce, and bank charges 1s. 8d. per ounce, make a total of 2s. 2d. or a direct loss of 5d. per ounce. On the other hand, the extra value paid in London for silver will more than pay for shipment and treatment. By assay you should receive £2000 for this shipment. This is quite within the mark as some of the assays went as high as £24 odd."

"The property is developing well. I was out at the mine to-day as the manager sent in word they had struck a big reef in the sink. This is good news. I brought in a sample of stone for assay. It is a nice kindly-looking stone, and should be good."

Cables.—Croydon, September 30th: "Shipped 131 tons."

AUSTRALASIAN MINES' OUTPUT FOR OCTOBER.

GOLD.

	May. ozs.	June. ozs.	July. ozs.	Aug. ozs.	Sept. ozs.	Oct. ozs.
Aladdin	1,250	5,100	2,560	1,285	1,690*	776a
Amana Wentworth	20	—	—	—	—	—
Austin	130	—	—	—	—	—
Baker's Creek	1,245	1,115	943	1,140	1,208	1,615
Bayley's No. 1 South	479	259	158	152	115	161
Bayley's Reward	585	885	630	200	220	197
Bonnie Dundee	75	—	—	220	279	575
Brilliant	2,366	—	2,940	2,590	2,780	2,570
Brilliant Block	2,511	3,271	2,074	2,312	2,220	2,770
Brilliant St. George	1,906	2,572	2,848	2,734	4,204	2,730
Cassidy Hill	—	—	70	—	—	—
Consolidated Gold Mines of W.A.	—	—	—	—	—	—
Consolidated Murchison	311	—	750	418	306	—
Coolgardie Mint	—	689	—	—	—	—
Cue Victory	—	—	480	250	—	—
Craven's Caledonia	455	375	—	485	420	—
Cumberland	494	421	593	580	464	241
Day Dawn Block	1,485	719	1,271	1,651	1,414	2,639
Day Dawn P.C.	490	428	313	353	393	483
Emerald Reward	276	90	106	—	—	—
Gem of Cue	—	—	28	—	—	—
Goldconda	—	—	528	360	307	441
Great Boulder	1,276	2,299	2,933	2,906	6,386	3,208
Hauraki	—	—	3,269	2,911	—	—
Kapanga	—	—	490	285	—	—
Lake View	878	583	—	1,234	1,534	—
Mills Day Dawn	2,365	3,724	2,722	3,074	2,166	1,584
Mosman	830	339	253	430	363	—
Mount Burgess	539	1,363	244	478	—	—
Mount Leyshon	—	—	—	472	—	—
Mount Morgan	9,832	10,101	11,658	11,120	11,165	12,340
Murchison United	47	—	11	—	—	—
New Queen	972	1,640	1,043	790	900	790
North Boulder	—	—	70	—	—	—
Star of the East	346	409	777	217	—	—
Victoria Association	1,910	845	1,284	1,157	1,195	1,570
Victory	241	109	166	170	—	230
Waihi	£8,000	£9,200	£9,600	£9,500	£10,700	£11,400
Wentworth Propr'ty	2,300	2,290	1,850	1,600	1,532†	—

SILVER.

	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
Broken Hill Proprietary	870,583	798,253	796,238	570,003	451,473	601,945

* Six weeks. † Three weeks. a Three weeks

The SIMMER and JACK GOLD MINING COMPANY'S London offices have received a cable from the head office, Johannesburg, stating that a special general meeting of shareholders has been called for the 4th December, when the scheme for the reconstruction of the company will be submitted. The following are the details of the scheme:—The present capital of the company, £250,000, to be increased to £5,000,000, in 1,000,000 shares of £5 each. The present shareholders to receive 3½ new £5 shares for every £1 share now held, absorbing 875,000 shares; 65,000 shares to be offered *pro rata* to shareholders at £7 10s. per share in the proportion of 1 share for every 15 new shares, and guaranteed, free of commission or option, by the Consolidated Gold Fields of South Africa (Limited), and the remaining 60,000 shares to be held in reserve.

MESSRS. MUSGRAVE BROS., hydraulic and general engineers, of Leeds, have appointed Messrs. Julius Harvey and Co., Manston House Chambers, 11, Queen Victoria-street, E.C., as their representatives for London and district, for their home and foreign trade

COMPANY FINANCE.

Reports, Balance Sheets, Dividends, &c., of Mining and other Companies.

The British Broken Hill Proprietary Company.

The following is the report of the directors for the half-year ending June 30:—The annexed balance-sheet is framed on the new capital account, as reduced from £1,320,000 to £264,000. The report of Mr. Retallick, the manager at Broken Hill of the company's mine, is appended, from which it will be seen that a large amount of exploratory work has been done during the half-year now under review, with very favourable results as regards the reserves of both carbonate and sulphide ores brought to sight and now available for stoping. The ore sold during the half-year, after deducting freight, produced £5246 5s. 1d., and after paying all expenses of mining, assaying, carriage, &c., it yielded the very handsome net profit of £3 5s. per ton, leaving on hand 4000 tons, of the estimated selling value of £4280 15s. The bulk of this ore was obtained from Marsh's shaft (No. 6). The quantity of ore discovered and opened out during the half-year by exploration cannot be estimated at less than 50,000 tons, and the capital value of the mine may fairly be regarded as increased by at least this amount. The cost of this exploration has been ascertained by the Colonial Committee to be £3365 15s. 2d. In the balance-sheet £2000 of this sum has been credited to increase of value of the mine, and the balance of £1365 15s. 2d. has been written off. The law suit brought by the Dry Creek Company for damages for non-fulfilment of this company of an old contract for supply of ore, terminated in a verdict of £20 damages, and a small amount for costs; but with the costs of the company's own solicitors, and the travelling and other expenses of the Adelaide directors and officers to Melbourne, the suit has involved the company in an expenditure of £643 6s. 9d., which, unfortunately, reduces our profits to that extent; and there is still a balance outstanding on this account. The Dry Creek Company has applied for a new trial; with what result the directors do not at present know. The company's available funds have been favourably invested, and if sold at present market values, would realise a fair profit, while they continue to produce a good income. From the balance-sheet it will be seen that the liquid assets, after deducting amounts due to sundry creditors, amounted to £43,149 9s. 4d., as against £43,191 7s. 1d. on December 31, 1894, thus leaving the position of the company unaltered in this respect; but it is to be pointed out that for this purpose the ore in stock is only taken at cost, being about £800 below its estimated selling value. For some time past the Adelaide directors have been carefully watching the results of different means of concentration of carbonate and sulphide ores, and are much impressed by the success which has attended the use by neighbouring Barrier Mines of Hancock's jigs—a method of concentration carried on at a comparatively low cost and capable of rendering low grade ores both valuable and marketable. The crude ore is at present unsaleable owing to the quantity of gangue contained in it, but the Adelaide directors are satisfied that, by concentration in the manner above indicated, it will be rendered marketable, and a very profitable business will ensue. On their urgent representations, and subject to proper scientific advice and a report recommending the expenditure, the board has authorised the erection, at a cost not exceeding £10,000, of a plant capable of treating up to 2000 tons weekly; and if the advices which the board has received from the colony are substantiated, this cost should be more than repaid out of profits during the first half-year's working. The treatment of sulphide ores is engaging the close attention of the directors, and they are anxiously looking for some thoroughly satisfactory method of dealing with ores of this complex character. Several methods have been, and some still are, under their consideration. Meanwhile, they have every hope that the ores of the company, concentrated by the Hancock jigs, and thus made marketable, will be readily disposed of in the colonies and Europe at a substantial profit.

Two of the directors, accompanied by metallurgical experts, went, in June last, to inspect a process of which they entertained great hopes, but they found it conducted in so small and experimental a manner that its success on a commercial scale could not be predicted with any degree of certainty. It is now being tried on a much larger scale, and this and other systems for treating sulphides will be attentively watched by the board. At the meeting it will be proposed, out of the profit of £975 4s. 3d. to the credit of profit and loss, to pay to Mr. Woodhead the sum of £236, on account of his expenses in reorganising the company, leaving a balance of £200 to be dealt with on a future occasion. Shareholders who have not already exchanged their old certificates for new ones are requested to send them at once to the secretary.

Elkhorn Mining Company.

In a circular to the shareholders of the Elkhorn Mining Company, the secretary states:—"For many months past the directors have watched with anxiety the continued unfavourable reports from the lower levels of the mine, in the hope that more promising developments would ensue; but Mr. Molson has at last been forced to the conclusion that the ore bodies which have proved so productive in the upper levels have become too narrow and low grade to permit of their profitable working or to justify the further exploration of the mine in depth—a conclusion only arrived at after long and careful consideration. Mr. Molson is of opinion that the reserve of ore in sight represents about three or four month's working at the present rate of production, and that after this has been extracted the Elkhorn Mine must be considered as exhausted. While regretting to report this state of affairs, the directors cannot but feel that the mine has been an excellent investment for its proprietors, returning, as it has, up to the time of cessation of dividends, a total of about 150 per cent., which is equivalent to a return of the whole capital, together with interest at the rate of 10 per cent. per annum, apart from the present market value of the shares. Bearing in mind the probable early exhaustion of the mine, the directors have been desirous to find a fresh field of operations where the assets remaining at their disposal might be profitably invested, and they now offer the shareholders such an opportunity as will, they believe, give to the Elkhorn Mining Company a new and indefinitely extended period of life, with a renewal of the handsome returns earned in its early days. The directors have been in negotiation with the owner of some very valuable silver-lead mines, which they have obtained under offer. The properties are situated on East Fryer Hill, Leadville, Colorado, a district which has produced during the last 15 years nearly £40,000,000 sterling, but in which, up to the present, English investors have had but few opportunities of interesting themselves. The properties now offered comprise the unexpired leases of about three years and four years and a-half respectively of two contact lode claims, known as the Fitzhugh and the Kennebec, of a combined area of about 13 acres, held under the customary royalties, together with seven mining claims adjoining, comprising about 50 acres of freehold land, known as the Evans Donelly group, all in the immediate vicinity of many famous and valuable properties, a number of which are controlled by the Union Leasing and Mining Company, a local corporation now raising 100 tons of high-grade ore per day, and making very large profits. The titles to all the properties are United States patents, which are unassailable, and equivalent to English freehold. The Fitzhugh Mine was leased by its owners for a period of five years from December 31, 1893, before mineral was reached, since when large sums have been spent by the lessee on plant, machinery, and development. The mine now possesses one of the finest equipments in Colorado, capable of raising 500 tons of ore per day, and the developments have proved the existence of several ore bodies of great value, an average of about 2000 assays taken during the progress of the work giving over 100 ounces of silver per ton. This grade of ore, even at the present exceptionally low price of silver, leaves a large profit on working. In September, 1894, the vendor acquired an option up to December 31, 1895, to purchase the leases of the Fitzhugh and Kennebec and the freehold of the Evans Donelly claims for a sum equivalent to about £86,000. Since the date of this option mineral has been reached, and the properties have consequently largely increased in value. It is with a view of acquiring and exercising this option that shareholders are invited to reconstruct the Elkhorn Mining Company on the terms hereafter mentioned. The present manager of the property, Mr. T. Kyle, who is a man of large experience in Leadville contact mining, and who foretold the existence of valuable ore bodies in the district when such a possibility was generally discredited, expresses his firm belief that the ore bodies encountered in the Fitzhugh, which trend in the direction of the Evans Donelly claims, will, undoubtedly, be found underlaying these properties. Although a small portion only of the Fitzhugh has been developed, the work done has opened up over 16,000 tons of high-grade ore, of which very little has been extracted beyond that necessary to develop the mine, the question of immediate returns having been subordinated to the complete development and equipment of the property so as to permit of large and continuous shipments when once extraction should commence. The product of the mine, which consists of carbonate and sulphide ores of high grade, is shipped direct and sold upon assay value to the smelters. Since the commencement of operations 1823 tons of ore have been sold, giving a net return from the smelters of about $31 per ton. Mr. Kyle states that the property can within 12 months be put in a position to ship an average of 200 tons of ore per day and adds in his report:—'The importance of the undertaking does not depend upon the ore which is in sight, but its great prospective value in the development of the mineral which will undoubtedly be found as a continuation of the ore chutes heretofore referred to, and upon the completion of the development work it is my firm belief that the property will net from $500,000 to $750,000 yearly for many years to come.' Before recommending the purchase of these properties, the directors have obtained an independent report upon them from Captain J. W. Plummer, the present manager of the De Lamar Mine, and late manager of the Elkhorn Mine, in whose opinion they believe the shareholders will have the fullest confidence. Captain Plummer, who had copies of Mr. Kyle's and the vendor's reports before him at the time of making the examination, summarised his report by cable as follows:—'On the whole, I consider it a most valuable property; only requires development to fulfil all that has been claimed for it.' The directors cannot but consider this opinion as eminently favourable to the acquisition of the properties, and as justifying them in immediately convening an extraordinary meeting of the company for the purpose of submitting the formal resolutions requisite to liquidate and reconstruct the company, which it is proposed to do on the following lines:—

The Elkhorn Mining Company to be liquidated.		
A new company, to be called the New Elkhorn Mining Company, to be formed with a capital of		£300,000
In 87,500 priority shares of £1 each.....	£ 87,500	
And 212,500 ordinary shares of £1 each	212,500	
Total.....	£300,000	

The priority shares to receive a cumulative preferential dividend of 100 per cent. before any dividend is paid on the ordinary shares:—

Priority shares—		
87,500 to	be offered in the first instance *pro rata* to shareholders in the Elkhorn Mining Company at par, payable 5s. on application, 5s. on allotment, 5s. in one month, and 5s. in two months after allotment	£87,500
Ordinary shares.		
35,000 fully-paid	to be allotted to the liquidator of the Elkhorn Mining Company in payment for all assets, thus permitting of aldistribution of one share fully paid in the new company for every five shares fully paid held in the old company	35,000
177,500 to	be allotted to the vendor on account of the purchase of the properties herein described ...	177,500
300,000	Total	£300,000

Amplified details of the reconstruction scheme will be found on a separate enclosure. The consideration for the transfer of the various properties has been agreed with the vendor at a sum of £86,000 in cash, with which to carry out the purchase above mentioned, and the allotment of 177,500 fully-paid ordinary shares. The cash and liquid assets of the old company are of the estimated value of about £25,000, which sum will be available for working capital, and is considered ample for all purposes. No commissions, promotion money, or intermediary profits of any description have been or will be paid, as the directors have had the advantage of dealing direct with the owner of the option, who is so assured of the value of the properties offered that he is content and has agreed to take the whole of the purchase price of the option in ordinary shares, which will receive no dividend until 100 per cent. has been paid on the priority shares." The meeting of shareholders has been convened for the 18th inst.

Harriotville Gold Mines

The report of the Harriotville Gold Mining Company (Limited for the year ending March 31, together with supplementary accounts to October 24, to be submitted at the seventh ordinary general meeting, to be held in London on November 20, states that the value of the gold sold during the period embraced by the accounts was £3011, and that other receipts amounted to £251. The expenditure, including a charge of £550 for depreciation of machinery and plant, was 13,477, the net result of the operations for the 19 months (about) being a loss of £5215. The amount now standing to the debit of profit and loss account is £7248. The superintendent has for some time past been urging upon the directors the advisability of raising additional funds to continue operations at certain promising points which he indicates, and the board have been carefully considering the desirability of taking steps with that object. Any doubt which they entertained as to the wisdom of this course has been removed by news recently received from the mine. A discovery has been made which has entirely changed the aspect of affairs. The discovery appears to be a very valuable one, and, if present prospects be maintained, should result in good profits. There is no doubt that this find should be vigorously followed up, and it now remains to provide the necessary capital for this purpose. After much consideration the directors have come to the conclusion that the best and most economical mode of raising the necessary funds will be by a reconstruction of the company, and with that object it is proposed to wind up the existing company and reconstruct it on the following lines: The capital of the new company to consist of 150,000 shares of 4s. each. Shares to be offered to existing shareholders in the proportion of one share in the new company for every share held in the old company, and to be credited with 2s. per share paid up. This will leave a liability of 2s. per share, which should provide sufficient working capital, and may be the means of yet bringing the concern into a prosperous condition.

New Chimes Gold Mining Company.

The expenditure and revenue account for September is as follows: Working expenditure on 3936 tons milled: Mining and hauling, £2061 1s. 7d.; transport and milling, £935 10s. 4d.; maintenance, £937 5s. 10d.; general expenses, £276 5s. 3d.; total working expenses, £4210 3s.; expended on development, £1235 4s. 9d.; total, £5445 7s. 9d.; balance profit, £2415 7s. 9d.; total, £7860 15s. 6d.—Revenue, on 3936 tons milled: Native gold, 1834 ounces 14 dwts., net value, £6510 19s. 7d.; concentrates, received for 198·2 ounces bullion won, £544 3s. 2d.; less expenses, £87 19s. 7d.; total, £457 3s. 7d.; tailings (2588 tons treated), value 398·3 ounces bullion won, £1144 8s. 7d.; less cost of treatment, £250 12s. 3d.; total, £393 12s. 4d.; total, £7860 15s. 6d.—Capital expenditure. Main shaft, Chinese reef, £522 10s. 11d.; dams, £33 10s. 6d.; cyanide plant (concentrates), £130 16d. 3d.; tailing pump, £136 4s.; total, £823 1s. 8d.—Analysis of working expenses and revenue. Mining and hauling, 10s. 5·68d. per ton; transport and milling, 4s. 9·05d.; maintenance, 4s. 9·15d.; general expenses, 1s. 4·84d.; total, £1 1s. 4·72d.; expended on development, 6s. 3·32d.; total working expenditure, £1 7s. 8·04d. Native gold, £1 13s. 1·01d. per ton; concentrates, 2s. 3·82d.; tailings, 4s. 6·49d.; total revenue, £1 19s. 11·32d.; net profit, 12s. 3·28d.

East Rand Syndicate (Limited).

The following circular has been sent to the shareholders: I beg to inform you that the provisional agreement entered into by the directors of this syndicate with Messrs. H. Eckstein and Co. and Messrs. S. Neumann and Co., has been duly confirmed at a special general meeting of shareholders held at Johannesburg on October 19. In terms of the said agreement, the whole of the company's mining property, assets and liabilities, will be transferred to a new company to be formed with limited liability, and registered in the South African Republic under the name of the Witwatersrand Deep (Limited), which will have a nominal capital of £400,000 in 400,000 shares of the nominal value of £1, to be applied as follows:—

To the shareholders of the syndicate	270,000	shares.
To provide working capital	65,000	"
To be held in reserve	65,000	"
	400,000	"

Shareholders in this syndicate are now entitled to subscribe for their proportion in the 65,000 shares set apart for the purpose of creating the working capital of the new company at £2 10s. per share *pro rata* to their registered holdings—*i.e.*, 130 Witwatersrand Deep shares for every 100 shares held in the East Rand Syndicate (Limited). Applications for fractional shares will not be entertained. Applications should be sent in to this office, accompanied by bank draft to bearer and crossed, for amount of subscription plus ¼ per cent. exchange, not later than November 30, after which date no applications will be accepted. Share certificates of the East Rand Syndicate (Limited) should be forwarded at once to this office, for the purpose of being sent to Johannesburg and exchanged for shares in the Witwatersrand Deep (Limited). Listing form is enclosed herewith.—(By order) A. Moir, agent.

New Welsh Slate.

The report of the New Welsh Slate Company (Limited) for the year ending July 13, to be presented at the general meeting to be held in London November 20, states that the output was 6925 tons, against 6906 in the previous 12 months. The make would have been larger, but for the exceptional frost in February, which necessitated the stoppage of the works for the whole of that month. The working account shows a profit of £3135, of which £461 is required to liquidate the loss brought forward, and £2000 for the payment of debenture interest, leaving a balance of £674 to be carried forward. The directors have endeavoured to increase the output by developing to the small extent which has been in their power, though even this has only been possible by their giving the company some temporary financial assistance. The rock in the lower quarry has improved in quality, and the board are of opinion that, in view of the decreasing production of old vein slates, vigorous development expenditure will amply repay itself. They, therefore, strongly recommend the shareholders to subscribe for the unissued preference shares (1895), if a satisfactory arrangement can be made with the debenture-holders. The directors recommend that the balance of £674 be dealt with as profits, and the bonus dividend paid to the co-operative shareholders, and that the dividend due on the preference shares for the year ending July 14, 1893, be paid from such profits as soon as £4000 or upwards of additional working capital is raised.

— The WORCESTER EXPLORATION AND GOLD MINING COMPANY (LIMITED) have declared a dividend of 10 per cent., payable in South Africa on December 16 to all shareholders registered on November 15.

— The directors of the GROOTFONTEIN EXPLORATION COMPANY (LIMITED) and the LISBON-BERLYN COMPANY (LIMITED) have ordered a complete set of diamond rock-boring apparatus from the Aqueous Works and Diamond Rock Boring Company (Limited), the well-known firm of mineral prospectors and artesian well borers. The boring machines will be powerful, designed to put down borings to a depth of 2500 feet, or deeper if required, and part of the plant has already been despatched.

— The transfer books of the OCEANA COMPANY (LIMITED) will be closed from November 19 to December 2, inclusive.

— The BRITISH SOUTH AFRICA COMPANY is now prepared to receive bankers' receipts for the purpose of verification, and in order that the new share certificates may be prepared. The company is also prepared to receive applications for the registration of such fractions of these shares as make up one or more whole shares.

— The JOHANNESBURG CONSOLIDATED INVESTMENT COMPANY inform us that next week this company will publish a full list of its properties and interests in the Transvaal.

— Sir William G. Davies, K.C.S.I., has joined the board of the CONSOLIDATED GOLD MINES OF WESTERN AUSTRALIA (LIMITED).

— The SCOTTISH WESTRALIA (LIMITED) has secured a one-third interest in George Lindsay's find 32 miles north of Kalgurlie. The property consists of 156 acres. Dr. Chewings has, we are informed, reported fully upon the property, and describes it as extremely valuable. Three very rich reefs run through the property, and water is expected to be reached at 80 feet.

— We are requested to notify that Mr. F. E. Harman and Mr. W. C. Punchard have retired from the board of the CONSOLIDATED GOLD MINES OF WESTERN AUSTRALIA (LIMITED).

LATEST FROM THE MINES.

CABLEGRAMS AND TELEGRAMS.

BAYLEY'S REWARD No. 1 SOUTH. — The following cable, dated the 15th inst., has been received by this company's London office from its head office at Melbourne:—"116 ounces, 95 tons."

BAYLEY'S REWARD CLAIM.—The following cable, dated the 15th inst., has been received by this company's London office from its head office at Melbourne:—"173 ounces, 356 tons; water very scarce."

BLAGROVE'S FREEHOLD.—The directors have received the following information from the manager, viz:—"Shaft has been sunk 32 feet during the month."

BLOCK B. LANGLAAGTE ESTATE. — Production for October. By cable.—"Mill. Stamps running, 75; ore crushed, 8866 tons of 2000 lbs.; gold retorted, 2664 ounces.—Tailings, cyanide process: Tons treated, 5160 tons of 2000 lbs.; gold recovered, 506 ounces.—Concentrates, cyanide process: Tons treated, 230 tons of 2000 lbs.; gold recovered, 436 ounces; total gold recovered, 3606 ounces."

BONNIE DUNDEE.—The London office have received the following cablegram from Charters Towers:—"Have crushed during the month 426 tons of quartz for 575 ounces of gold, approximate value £1950. Reef in the end of No. 1 level north of good pyrites, and in the stopes above of medium quality."

BRILLIANT AND ST. GEORGE UNITED.—The directors have received the following cablegram from the directors in Charters Towers:—"Have crushed during the month 1380 tons of quartz for 2730 ounces of gold. Have declared the usual monthly dividend of 1s. per share. The approximate value of this return is £9420."

CARRINGTON.—The manager, Mr. Alan B. Bright, writes under date September 24 and 28:—"We are still getting floors in the shaft which we are sinking, all dipping in the right direction for the Victoria reefs. At any moment a formation may be cut."

CROWN REEF.—Results for October received by cablegram from Johannesburg:—"Number of days working 120 stamp mill, 29 days 13 hours; crushed by 120 stamp mill, 18,991 tons; yield in smelted gold from 120 stamp mill, 6112 ounces; yield in smelted gold from cyanide works, 4988 ounces = 11,100 ounces.—Working expenditure and revenue. 120 stamp mill and cyanide works 18,991 tons milled. To mining, transport, milling, cyanide, general charges, maintenance and mine development, £22,724; profit for month, £14,367 = £37,091.—By gold account, 6112 ounces from 120 stamp mill, £20,812; 4988 ounces from 120 stamp cyanide works, £16,279 = £37,091. Revenue per ton crushed, £1 19s. 0·74d.; cost per ton crushed, £1 3s. 11·18d.; profit per ton crushed, 15s. 1·56d."

DE LAMAR.—The following is the cabled return for the month of October:—"Crushed during the month 3825 tons. Bullion produced in the mill $70,325. Estimated value of ore shipped to smelters $8500. Miscellaneous revenue $840. Total produce $79,665. Total expenses $41,760. Profit for the month of October $37,905; or at $4·90 to £ sterling $7736."

ELKHORN. — Bullion produced in the mill for the week ending November 9, 8700 ounces.

EASTLEIGH.—October returns. The mill has run 27 days, crushing 4104 tons, yielding 710 ounces; cyanide treated, total 2400 tons; tailings yielding 1332 ounces.

FERREIRA GOLD. — Copy of cablegram received from Johannesburg:—"Results for October: Tons crushed, 6291; bar gold extracted, 5002 ounces; concentrates caught, 190 tons; assay value of concentrates, 7 ounces fine gold per ton. Cyanide works: Bullion produced from tailings, 1408 ounces."

GEORGE GOCH AMALGAMATED.—The result of work done during October is as follows:—7023 tons crushed yielding 1902 ounces, and 1281 ounces from tailings.

GLENCAIRN.—The London agents announce receipt of following cablegram—"Production for October, 1955 ounces, 100 stamps 7 days. The new cyanide plant and the 100 stamp mill are working well."

GOLCONDA.—The following cable has been received:—"Have cleared up after a run of 252 hours. Crushed 230 tons, which yielded 441 ounces. An average sample of tailings assayed 7 dwts. per ton."

GREAT BOULDER PROPRIETARY.—The following cable message has been received from the manager, Mr. Zebina Lane: "Crushed own battery 71 tons, yielding 557 ounces; public battery 180 tons, second class ore yielding 512 ounces. Total gross yield, 1069 ounces."

GINSBERG.—The London agents announce receipt of the following cable:—"Production for October 857 ounces, 10 stamps, 29 days."

GELDENHUIS ESTATE.—Copy of cablegram received from the head office, Johannesburg:—"Last month's (October) profit was £6500."

HARQUAHALA. — The following information has been received from Mr. Raymond:—"During month of October treated 3809 tons of tailings, yielding $13,300. Miscellaneous revenue $250. Total revenue $13,550. Expenses $6200. Profit for the month of October $7350; or at $4·90 to £ sterling £1500."

HARRIETVILLE.—The following telegram, dated November 9 has been received from the Superintendent:—"Second mill test, Tiddledee Mine 60 tons 106 ounces, a fine prospect."

ISLE OF MAN.—The secretary has sold 100 tons of this company's ore (chats.) at £8 18s. 9d. per ton. The secretary has sold 100 tons of this company's ore at £10 4s. 6d. per ton.

INVESTMENT AGENCY OF AUSTRALASIA.—The London office has received the following cable from the Melbourne secretary of the Ivanhoe Gold Mining Company, West Australia:—"November 10, crushed 96 tons for 136 ounces; total crushed to October 27, 1300 tons for 2300 ounces."

LANCASTER.—Result of working for October: Crushed 600 tons gold won 210 ounces, extracted from tailings 138 ounces. Total 348 ounces.

LA CAMPANA.—Cable received:—"Crushed 300 tons for net profit of £200."

LADY FORREST (Murchison). — A cablegram received from manager, November 12, states:—"Cut O'Doherty's lode 100 feet level, lode 3 feet, showing gold throughout."

LANGLAAGTE ESTATE.—Production for October. By cable.—"Mill. Stamps running, 160; ore crushed, 22,287 tons of 2000 lbs.; gold retorted, 7318 ounces.—Tailings, cyanide process: Tons treated, 13,640 tons of 2000 lbs.; gold recovered, 1975 ounces.—Concentrates, cyanide process: Tons treated, 476 tons of 2000 lbs.; gold recovered, 1702 ounces; total gold recovered, 11,055 ounces."

LAWLERS.—A cablegram has arrived from the mines, asking that the millman should be there by December 1.

LE CHAMP D'OR FRENCH. — The following cable has been received from the manager of the mine:—"During the month of October, mill worked 27 days; crushed, 5500 tons, yielding 2888 ounces; cyanide, 4100 tons, yielded 1117 ounces; total, 4005 ounces."

SALISBURY.—Last month's crushing yielded 3000 ounces.

MAY CONSOLIDATED. — The following cable message, dated Johannesburg, November 7 has been received at their office:—"The yield of gold during the past month (October), was 3671 ounces from 11,000 tons crushed. Mill running 30 days; cyanide, 1933; tons, 6300."

MURCHISON NEW CHUM.—The following is copy of cable received from the mines:—"Cleaned up November 7, 1100 ounces from 320 tons."

MOUNT MORGAN (Queensland).—Results for the month of October:—Tons chlorinated, 9209; gold returned, 12,540 ounces.

MURCHISON GOLD FIELDS.—Manager of Victoria Mine cables:—"90 tons of ore crushed has yielded 265 ounces of retorted gold."

NEW CRŒSUS.—Production for October (60 stamps 28 days) 2766 ounces.

NEW PRIMROSE.—The London agents announce receipt of the following cable:—"Production for October 11,584 ounces, profit £14,667, 160 stamps, 29 days."

NEW CHIMES.—Last month's crushing yielded 2370 ounces of gold.

NEW HERIOT.—Last month's crushing yielded 5803 ounces.

NEW COMET.—Result of crushing for last month with 40 stamps, is as follows:— The tonnage milled amounted to 6059 tons; gold recovered from the plates 1743 ounces; by cyanide, treated 4940 tons, gave 1228 ounces, making a total of 2971 ounces. The cable further states that the directors consider the return satisfactory, bearing in mind that the plates had to be set, and the cyanide works were all new.

NEW GUADALCAZAR.—The production of quicksilver for the past week as cabled from the mines amounts to 2650 lbs. = 35½ flasks.

NEW QUEEN.—The directors have received the following cablegram, dated Charters Towers, November 9, giving result of crushing for past fortnight:—"235 tons yielding 410 ounces gold. Have drawn on you for £1000."—Note. A word in this message having been mutilated, same is being repeated, and will be published on receipt. The width of the reef is 20 inches. Appearances are favourable. Have shipped per *Duke of Buckingham* 1021 ounces.

NIGEL.—Cyanide output for October should have been cabled 1365 ounces instead of 1269 ounces. The output for October was therefore: Battery, 1185; cyanide, 1365; equal to 2550 ounces.

NEW QUEEN.—This company notifies that the illegible word in the cablegram from the mine, dated 9th inst, has been repeated, and means that the shaft has been sunk a further 20 feet for the past fortnight.

ORIENT.—The following cablegram has been received from the manager, dated Cairns, Queensland, November 9:—"Unless delayed by accident from unforeseen circumstances expect to commence crushing about fourth week in December. The delay was caused by tramway. The necessary alteration has been made. Good progress is being made with erection of machinery. Am doing my utmost to expedite matters."

PAARL CENTRAL.—A cablegram has been received from the head office at Johannesburg, stating the following results for last month, October:—"Mill crushed 3306 tons, yielding 1424 ounces of gold; cyanide works treated 2765 tons, yielding 906 ounces of gold. Total, 2330 ounces of gold. Total value £7861. The battery was stopped on October 24 for want of water, and will recommence crushing to-day November 9."

PAARL CENTRAL.—A cablegram has been received from Johannesburg announcing that the purchase of 27 claims from the Rand Mines (Limited) was duly confirmed at the special general meeting of shareholders held on 13th inst.

PRINCESS ESTATE.—Result of working for October: Crushed 2650 tons, gold won 1250 ounces; extracted from tailings 850 ounces. Total 2100 ounces.

PORGES RANDFONTEIN.—Production for October. By cable.—"Mill: Stamps running, 60; ore crushed, 6725 tons of 2000 lbs.; gold retorted, 3201 ounces.—Tailings, cyanide process: Tons treated, 3400 tons of 2000 lbs.; gold recovered, 478 ounces.—Concentrates, cyanide process: Tons treated, 60 tons of 2000 lbs.; gold recovered, 142 ounces; total gold recovered, 3821 ounces."

QUEENSLAND SMELTING COMPANY.—The manager reports having shipped 700 tons of argentiferous galena valued at £5500, and having ready for shipment bullion to the value of £6000.

ROBINSON.—The following cable from the head office at Johannesburg is to hand:—"Profit for month of October, £39,500."

ROODEPOORT UNITED MAIN REEF.—Crushing for October, 7380 tons produced 3626 ounces; cyanide, 1197 ounces; profit, £8320.

SPITZKOP FARM.—Return for October: — 768 English tons gave 42 ounces from 10 stamp mill, 261 ounces from cyanide, 520 ounces from hydraulic. Total 823 ounces.

SIMMER AND JACK.—A crushing of 12,130 tons obtained 5474 ounces of gold from mill. There was also 620 ounces of gold obtained from chlorination, and 1692 ounces of gold from tailings by cyanide during the month.

SIMMER AND JACK.—Last month's profit was £10,778.

VIOLET CONSOLIDATED.—The directors have received the following cable from their manager:—"Manager reports assay of samples from to-day gives No. 5 level 17 dwts, per ton, No. 6 level 31 dwts, No. 7 level 13 dwts, No. 8 level 21 dwts. The prospect of the value of the property at this moment is fully 12 dwts. per ton. It is considered here will be likely to improve in depth."

VICTORY (Charters Towers). — Cablegram received from head office in Sydney:—"Crushed from No. 1 shaft 40 tons for 40 ounces. Crushed from No. 2 shaft 260 tons for 190 ounces. Total 300 tons for 230 ounces gold. Have stopped sinking No. 3 new shaft, and are now starting underlie on vein formation cut at 325 feet."

VICTORIA AND QUEEN.—The directors have received a cablegram from Charters Towers, as follows:—"Have cleaned up after crushing 178 tons for 249 ounces of gold."

WEMMER.—The result of work done during October is as follows:—7052 tons crushed, yielding 4098 ounces, mill running 30 days; and from cyanide plant 4375 tons treated, yielding 1585 ounces; 160 tons concentrates caught, assaying 120 dwts. (6 ounces); profit for month, £11,057.

WEMMER.—The following advice is to hand by cable:—"The profit for the month of October is £11,057."

WENTWORTH GOLD FIELDS.—The following cablegram has been received from the mines:—"Five weeks' return totals 2858 ounces of gold (approximate value, £10,360), namely, 930 tons of ore have been crushed, yielding 1858 ounces, and 8 tons rich crude ore have been shipped, containing 1000 ounces. Generally, all is going well.

WOODSTOCK (Transvaal).—Copy of cable received from the manager:—"Am now preparing for sinking the shaft at Sybil open cutting, am quite satisfied conditions and prospects of the workings are most encouraging."

WORCESTER EXPLORATION.—Details of working for September:—1968 tons milled 804 from south reef, 1164 from main reef. 20 stamps working 29 days 1577 ounces 17 dwts., concentrates 250 ounces 18 dwts., total 1828 ounces 15 dwts.

SOUTH AFRICAN MINES' OUTPUT FOR OCTOBER.

THE following are the October returns, so far received, and the results for the previous five months:—

GOLD.

	May. Ozs.	June. Ozs.	July. Ozs.	Aug. Ozs.	Sept. Ozs.	Oct. Ozs.
Afrikander	303	—	—	—	—	—
Barrett	555	515	435	283	274b	815
Block B	3,126	3,020	3,240	3,581	3,594	3,606
Buffelsdoorn	4,384	4,100	4,660	3,361	—	—
Champ d'Or (French)	3,240	3,625	3,920	4,516	3,776	4,005
City and Suburban	9,491	9,471	10,096	10,216	8,381	8,597
Crown Reef	10,321	11,259	11,849	11,531	11,385	11,100
Durban-Roodepoort	5,838	5,854	5,899	6,006	6,089	6,318
Eastleigh	2 230	1,362	1,912	2,166	1,994	2,042
Ferreira	6,977	6,797	7,081	7,011	7,439	7,740
Forbes Reef	130	121	141	99	75	74
Geldenhuis Estate	7,467	7,614	7,778	7,783	7,236	6,898
Geldenhuis Main Reef	2,090	2,127	3,375	2,163	2,088	1,835
George and May	910	900	770	173	—	—
George Goch	3,220	3,258	3,053	3,099	3,361	3,244
Ginsberg	919	957	930	813	851	857
Glencairn	5.140	4,911	4,918	5,209	4,096	1,955
G. F. of Mashonaland	311	242	348	—	—	—
Henry Nourse	2 299	3,993	4,561	4,210	4,562	4,724
Joe's Reefs	456	299	327	331	150	230
Johannesburg Pioneer	1,155	1,305	1,310	2,692	2,507	—
Jubilee	2,624	2,657	2,613	2,707	2,727	2,176
Jumpers	6,139	6,588	6,198	7,079	6,497	6,355
Langlaagte Estate	13,006	13,007	12,021	11,472	11,081	11,055
Langlaagte Royal	2,424	2,064	3,401	329	—	—
Lisbon-Berlyn	791	691	590	522	640	644
May Consolidated	5,647	6,060	6 025	6,030	6,032	5,604
Metropolitan	2,315	2,227	2,411	2,173	1,981	—
Meyer and Charlton	3 115	3,123	3,296	3,745	3,642	3,358
Meyer and Leeb	268	130	—	—	—	—
Moodies	—	—	—	—	515	—
New Chimes	2,366	2,082	2,419	2,459	2,431	2,370
New Clewer Estate	1,749	1,236	1,389	1,479	—	—
New Crœsus	—	2,059	2,932	3,084	2,851	2,766
New Heriot	5,773	5,622	5 363	5,738	5,998	5,803
New Kleinfontein	2,775	2,638	2,826	2,829	2,631	2,608
New Midas	309	373	645	499	—	—
New Primrose	11,563	12,018	12,150	12,206	11,418	11,584
New Rietfontein	2,648	2,292	2,235	2,328	2,448	2,162
Nigel	4.204	4,235	3,633	3,724	2,658	2,550
Orion	3.550	3,650	3,750	3,700	3,719	—
Paarl Central	2,944	3,053	3,127	3,138	3 083	2,330
Porges-Randfontein	4,027	3,939	3,918	4,114	3,921	3.821
Princess Estate	2,021	1,950	2,105	2,150	2,000	2,100
Robinson	14,043	14,601	14.824	15,935	17,294	17,371
Roodepoort United M.R.	4,599	4,763	4,767	2,450a	4,691	—
Salisbury	2,126	2,614	2,278	2,450	3,043	3 000
Sheba	1.792	1,499	2,618	4.807	5,842	6,980
Simmer and Jack	8,888	8,617	7,085	7,543	7,783	7,786
Spitzkop	—	—	271	269	571	—
Stanhope	1,131	1,157	1,064	1,000	870	960
Sutherland Reef	518	504	769	763	593	598
Transvaal Gold	2,825	2,450	3,100	3,075	3,175	2,550
United Ivy Reef	145	216	—	—	—	—
United Langlaagte	1,140	1,834	2,261	2,297	2,316	2,164
Van Ryn	3,085	3,013	2,911	2,896	2,920	3,128
Vogelstruis Fontein	—	96	36	—	—	—
Wemmer	7,114	7,261	7,481	7,699	7,119	6,641
Wolhuter	2,400	2,415	2,420	2,420	4,715	5,240
Worcester Exploration	2,117	2,124	1,748	2,092	1,829	1,922

DIAMONDS.

	Carats.	Carats.	Carats.	Carats.	Carats.	Carats
Koffyfontein	3,150	2,675	3,050	2,320	2,275	3,450

COAL.

	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Cassel Colliery	19,810	18,000	23,459	20,635	21,500	—
Transvaal Coal Trust	30,200	29,700	33,100	31,400	28,300	—

a Battery stopped eight days. *c* 13 days. *d* Two days' delay; pumps out of order. *h* 12 days.
* Return not yet to hand.

The following are the profits or losses (the latter being indicated by an asterisk) made by South African mining companies:—

	May. £	June £	July. £	Aug. £	Sept. £	Oct. £
City and Suburban	10,686	—	—	—	—	—
Crown Reef	14,669	*	14,851	14,823	15,125	14,367
Geldenhuis Estate	11,547	10,800	11,400	10,800	10,000	6,500
Geldenhuis Main Reef	2,510	2,704	2,991	3,342	3,074	1,832
George Goch	3,974	3,519	2,249	2,627	—	—
Glencairn	7,600	7,250	7,300	7,758	8,009	—
Henry Nourse	2,164	—	—	—	—	—
Jumpers	8,738	10,760	8,000	10,900	10,370	9,500
May Consolidated	76,164	8,040	7,505	7,369	6,691	—
Metropolitan	674	—	—	—	—	—
Meyer and Charlton	5,310	5,280	4,740	5,570	—	—
New Chimes	3,353	2,282	—	—	—	—
New Clewer	—	—	650	1,000	—	—
New Heriot	9,598	—	—	—	—	—
New Kleinfontein	1,946	—	—	—	—	—
New Primrose	15,680	17,500	17,340	17,505	14,500	—
New Rietfontein	1,779	—	—	—	—	—
Orion	—	5,000	5,000	—	6,700	—
Paarl Central	—	—	4,105	—	—	—
Princess Estate	761	—	—	—	—	—
Robinson	30,500	31,500	32,500	34,500	39,500	39,500
Roodepoort United	8,512	9,095	8,760	—	8,630	—
Salisbury	326	—	—	—	—	—
Simmer and Jack	10,600	7,600	—	—	—	10,778
Stanhope	—	—	—	—	—	—
Van Ryn	2,776	2,810	4,070	—	3,089	—
Wemmer	12,771	13,842	2,131	14,917	14,025	11,057
Wolhuter	—	—	—	—	—	—

DIAMONDS.

New Jagersfontein	15,987	17,125	15,187	—	—	—

COAL.

Cassel Colliery	3,800	4,300	3,500	3,550	4,250	—
Transvaal Coal Trust	4,200	4,750	4,600	5,300	3,300	—

THE offices of the following companies have been removed to 3, Princes-street, E.C.:—Anglo-Belgian Exploration Company of Western Australia (Limited), Anglo-French Exploration Company of Western Australia (Limited), Anglo-German Exploration Company of Western Australia (Limited), Anglo-Netherlands Exploration Company of Western Australia (Limited), Anglo-Scandinavian Exploration Company of Western Australia (Limited), Chadwick and Co., (Limited), Golden Cement Claims (Limited), Great Boulder Main Reef (Limited), London and Continental Investment Corporation of Western Australia (Limited), Steynskraal Syndicate (Limited), West Australian Mines Development Syndicate (Limited), West Australian Venture Syndicate (Limited).

THE INSTITUTION OF MINING AND METALLURGY.—The second ordinary meeting of the fifth session will be held on the evening of Wednesday, November 20, in the lecture theatre of the Geological Museum, Jermyn-street, S.W., at eight o'clock, when the following papers will be read:—(a) "On the so-called 'Selective Action' of very Dilute Solutions of Cyanide of Potassium, used in obtaining Gold and Silver from Ores and other compounds," by Mr. James Maclear (vice-President). (b) "The Zeehan and Dundas Silver Field, Tasmania," by Mr. W. F. A. Thomas (associate).

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Tantallon Castle (via Madeira) ...	Nov. 29	Nov. 30
†State of California (via Madeira and Canaries)	Dec. 6	Dec. 7
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*Guelph (twin s'w	—	Nov. 17	Nov. 23	Nov. 30
†Moor	—	—	—	Dec. 7
*Goth(twin screw)	Dec. 1	—	Dec. 7	Dec. 14

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DIARY FOR NEXT WEEK.

Monday, November 18.
Golden Arrow Mine (Limited), Winchester House, 11.45.
Elkhorn Mining Co. (Limited), Winchester House, 12.
Chaffers Gold Mining Co. (Limited), Winchester Ho., 12.30.
East Pool Mine, Cornwall, 12.45.

Tuesday, November 19.
West Randt Estates and Land Co., Cannon-st. Hotel, 12.

Wednesday, November 20.
Harrietville Gold Mining Co., 6, Queen-street-place, 12.
New Welsh Slate Co., Winchester House, 2.
Institute of Secretaries, Winchester House, 6.15.
Institution of Mining and Metallurgy, Jermyn-street Museum, 8.

Friday, November 22.
Kaboonga Company (Limited), Winchester House, 12.
United Mexican Mines (Limited), Winchester House, 12.

The Mining Journal,
RAILWAY AND COMMERCIAL GAZETTE:
An Illustrated Record of Mining, Metallurgical, Railway, Financial, Industrial, and Engineering Progress.

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TO CORRESPONDENTS.—Letters on Editorial Matters, or containing literary contributions should be addressed to "THE EDITOR." All matter intended for insertion must be written on *one side of the paper only*. The return of rejected manuscripts cannot be guaranteed. The Editor invites correspondence and items of news or information from readers in all parts of the World.

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Displayed (Trade) Advertisements of 2 inches in depth (or more), Single Column measure, will be inserted at the following rates:—For 52 insertions 2s. 6d. per insertion for each inch in depth; for 26 insertions 3s. per insertion for each inch in depth; for 13 insertions 3s. 6d. per insertion for each inch in depth. Terms for special positions and contracts may be had on application.
. ADVERTISEMENTS (which should in all cases be sent direct to THE BUSINESS MANAGER) can now be received for the forthcoming issue of THE MINING JOURNAL, RAILWAY AND COMMERCIAL GAZETTE, on FRIDAY, at 18, FINCH LANE, E.C., up till 6 p.m., and at 3, DORSET BUILDINGS, SALISBURY SQUARE, E.C. until 9 p.m.

Editorial and Advertisement Offices:
18, FINCH LANE, LONDON, E.C.

Telegraphic and Cablegraphic Address: "TUTWORK, LONDON."
Codes used: "A.B.C.," Moreing's, and "Universal."

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LONDON: NOVEMBER 16, 1895.

ELKHORN COMPANY AND COLORADO PROSPECTS.

THE shareholders of the Elkhorn Mining Company will be asked on Monday next to reconstruct. The reason assigned is a rare one. The mine, after working successfully for some years, is now exhausted, and the directors, of course, have no other alternative but to inform the shareholders of this regrettable circumstance. We can imagine with what reluctance they do so. But in this they are only doing their duty, though it is a grievous one. There are not a few mines which are not only exhausted, but have never contained any mineral whatsoever, and yet, far from telling the shareholders of this, the directors lead them on with false hopes, reconstruction after reconstruction following each other with remarkable regularity. But the directors of the Elkhorn Mining Company are actuated by more honourable motives. They are not spending the shareholders' money to a useless purpose. They are told by the manager that the ore bodies in depth have become too narrow and low grade to permit of their profitable working, and they have promptly acted upon this information. The shareholders have reason to thank them for not allowing them to delay a day in being made acquainted with this state of affairs. Neither have they reason to be dissatisfied with the success of the company during its comparatively short existence. Since it commenced working in 1890 dividends have been paid with regularity, and to an amount exceeding by a good sum the original capital of the company. The directors are now in negotiation with the owner of "some very valuable silver-lead mines which they have obtained under offer." By a strange coincidence, perhaps, these are not situated in Western Australia, a country to which all companies successful and otherwise are directing their attention. This property, however, is situated in another quarter of the globe, which, in our opinion, is equally as promising as Western Australia, the claims and potentialities of which country we have not been behindhand in bringing to the attention of the readers of *The Mining Journal*. Need we add that this is Colorado, a country which, at the present moment, is occupying the attention of capitalists in all quarters of the globe? We should have felt a little more hopeful had this new property been a gold mine, instead of a silver-lead mine, for reasons which to everyone will be obvious. The directors again deserve the thanks of the shareholders for laying before them, along with the proposition for reconstruction, such ample details of the mine for which they are in negotiation. We are told that it is situated on East Fryer Hill, and comprises the unexpired leases of about three years and four years and a half respectively of two contact lode claims known as the Fitzhugh and the Kennebec, of a combined area of about 13 acres, held under the customary royalties; together with seven mining claims adjoining, comprising about 60 acres of freehold land known as the Evans Donelly group, "all in the immediate vicinity of many famous and valuable properties, a number of which are controlled by the Union Leasing and Mining Company, a local corporation now raising 100 tons of high grade ore per day, and making very large profits." We are further told that the mines possess one of the finest equipments in Colorado, capable of raising 500 tons of ore per day, and the developments have proved the existence of several ore bodies of great value, an average of about 2000 assays taken during the progress of the work, giving over 100 ounces of silver to the ton. Of course, considering the present low price of silver, this does not seem a very promising yield, but we are assured that it will leave a large profit on working. The directors are being guided by experts of experience and reliability. Mr. KYLE, the present manager of the property, has reported most encouragingly. That, of course, is not greatly to be surprised at, but what is most gratifying is that Captain PLUMMER endorses this report, and gives it as his opinion that the property is most valuable, and that developments will fulfil all that is claimed for it. The reconstruction scheme, of course, is open to criticism. We have no doubt it will be severely criticised, and that the Board will experience great difficulty in getting it accepted, especially as silver-lead mines, no matter what their prospects appear to be, are not regarded with much favour by investors. Their task would have been greatly facilitated had they been in negotiation for a gold mine. They may be forced to do so yet. In Colorado there are many, we believe, open for negotiation. Shareholders, on the other hand, must not be unreasonable. The directors are undoubtedly doing their best. They do not desire to force the scheme down the throats of the shareholders. The latter have it in their power to do as they choose, but it is the duty of the directors to advise them. Shareholders, as a rule, are apt to overlook this.

We might in this connection once more seize the opportunity of saying another word on behalf of Colorado in general, and Cripple Creek in particular. Readers might think from recent articles which we have published, and from the praise that we have accorded to this district, that we are acting in a manner unjustified by evidence. This is not so. We are immensely gratified, as naturally we should be, that signs furnish us almost daily proof that Colorado is destined to attract British capital in as great a degree as Western Australia, and perhaps, in time to come, in as great a degree as the Rand itself. We ourselves have been astonished at the rapidity—we may say suddenness—with which Cripple Creek especially has come to the front. Everyone who takes an interest in mining is talking about it, and the investor himself has had his attention brought to it in a manner that has quite amazed him, and, in some few instances, quite turned his head. One evidence in support of our prediction is that, not only have our articles been quoted in a large section of the general and technical Press without comment, but the movement has spread into quarters which have paid little or no attention to the progress of the mining industry. It would not be out of place to quote from one or two contemporaries who are also affected by present indications. Our esteemed contemporary the *Engineer and Mining Journal*, remarks:—"Notwithstanding the great and almost absorbing interest the South African gold mines have had for London speculators, some American mining properties are making their appearance on the foreign markets. Our London correspondent informs us that some Cripple Creek claims have been bought and capitalised, while some others have lately been examined and bought by Mr. HAMILTON SMITH for London parties. These mines are not floated by irresponsible promoters, but are brought out by the Exploration Company, a strong and well-known concern. The same company has also in hand a new Alaska mining property, which is reported to have something of the character which has made the Alaska-Treadwell a successful operation. We have also lately noted the sale of several California mines to foreign buyers. While these transactions are all of comparatively small amount, they are of interest, as showing that the attention of foreign investors is once more being directed to this country. They are, we believe, only the beginning of a movement which, when once started, will have a tendency to increase rapidly. We have often called attention to the fact that no better opportunities for the profitable use of capital can be found anywhere, and if European capitalists realise this it will be both for their advantage and our own." It then adds the following wise and weighty observations, which, of course, will have the full concurrence of all those who are desirous of

ening the mining industry unabused, and followed by no such ill-effects as we have witnessed recently, owing to wild and unreasonable speculation :—"The main point is that this movement should be kept in good hands. The public abroad is not always able to discriminate between good and bad properties. As long as the movement is under the control of responsible parties it will be beneficial; but anything approaching an American boom which will bring the activity of the promoter into play, is to be deprecated. There is room here for the use of all the capital which our abundant resources may attract, but every 'wild cat' worked off on foreigners inflicts a lasting injury on the country."

Although, of course, it is to be expected that the *Denver Republican* should be a little patriotic, and should be a little too enthusiastic, perhaps, in its praises, nevertheless, when all due discount is taken off the following quotations there remains a kernel of truth upon which the investor and the capitalist may act with advantage :—

"It long ago ceased to be necessary to sound the praises of Cripple Creek in the ears of Colorado people. They have been convinced for months—we cannot say years, for the camp is only about five years old—that it is one of the great camps of the world. What Coloradoans are anxious about is their chance of obtaining good claims in the district or interests in such claims. But the outside world is not yet convinced that Cripple Creek is what Colorado people claim it to be. It takes the production of a large amount of mineral to convince most men living at a distance that a camp is rich in the precious metals. In time, however, the world will be satisfied that in Cripple Creek, Colorado, it has a rival of the South African gold region, and the capital will flow in, and there will be a great boom in both stocks and mines. The record of this year's production will conduce to that end, if the hopes of the people in regard to the output are realised. There is no telling how far the Cripple Creek gold belt extends. A few years ago thousands of men could have been found who would have said that there was no gold in any part of the district. The formation was one in which old miners did not expect to find gold. That belief was overthrown by the practical test of pick and blast. Geologists have placed limits to the district, the men have supposed that no mineral would be found outside those boundaries. But as the critics were mistaken in the first instance, so they may be in error now. It is possible that the mineral area is twice or three times as large as it once was supposed to be. There are hills situated outside the established boundaries that are showing mineral in small quantities, and in those places development may reveal rich deposits of ore rivalling those of Bull Hill and Battle Mountain."

THE WEMMER COMPANY.

DURING the past week or two investors have had a rare opportunity presented to them, an opportunity of which we have counselled them to take the fullest advantage. We are delighted to see that they have done so, more willingly and readily than we anticipated. During such a crisis as we have experienced, much could have been forgiven them. To remain calm under the circumstances that have lately prevailed required almost superhuman effort, but it is a fact that real holders have displayed that judgment and foresight which, as a rule, they lamentably lack. They have seen prices go down to a level which paid no regard to intrinsic merits, and with a coolness most commendable they have picked up shares which a sudden movement could easily have sent up to a price beyond their means. Those especially have been fortunate who have picked up Wemmers and put them by, not only because they are bound to go up to a higher figure, but because they will receive dividends of a value rare even among South African companies. Wemmers have withstood the collapse much better than most securities, and the fall, though small in comparison with most securities, has brought the price to a level at which they can be snapped up without fear or trepidation. A dividend of no less than 100 per cent. has just been declared, and thus the Chairman's anticipation, expressed a few months ago, and which, at the time, caused so great a rise in the prices of the shares, has been completely realised. The capital of the Wemmer Company is a small one, and, therefore, there is no need for great profits to be earned to enable a large dividend to be distributed. This, of course, is a feature greatly in favour of the company, and its significance needs full consideration.

We well remember that when the Chairman spoke of the probability of a 100 per cent. dividend being distributed, many looked upon it as an unjustifiable forecast, while others, and especially a section of the Press, regarded it as highly improbable. Their scepticism, we admit, was supported by irregular and erratic monthly outputs, which one month would be very great and the next month quite insignificant. Nevertheless, at the time we were quite sanguine as to the possibility of such a dividend being paid, and our opinions were expressed in language which was deemed much too enthusiastic. In May last we penned the following sentence : —"Taking all things into consideration, no one can doubt that this is a magnificent property, that the prospects are not merely excellent, but brilliant, and that the shareholders are in every way to be envied." In the light of latter events, therefore, it is not likely we shall change our opinions, for it has been supported by evidence more convincing than even we anticipated. The progress made by this company in a short space of time has been nothing less than wonderful. This is in a chief measure due to its able management. Thus the shareholders have every need to be thankful to those who have the responsible task of looking after their interests. Gradually month by month, and half year by half year, the working costs have been reduced, and at the present time they stand at a sum to which no one can take exception. In February of last year the cost stood at 37s. 7½d. with a yield of 15 dwts. Now, 18 months afterwards, the costs have been reduced to a little over 20s., whilst the yield has gone up to over 21 dwts. Of course it cannot be said, if they are responsible for the reduction of cost, the management is responsible solely for the increase in yield. Truly this can, to some extent, be accounted for by more scientific methods of reduction, but the chief cause is due to the distinct improvement in the grade of the ore. This, too, is a fact greatly significant in estimating the future of the company, and it is one deserving of a great deal of consideration and study. For the previous half-year the profit amounted to £33,110. It is now increased by more than double the amount—viz., to £69,354. This is in addition to writing off £7860 for depreciation, as well as £7680 for the redemption of mining development. Adding this sum of £15,540, it brings the profit up to over 300 per cent. on the issued capital, therefore it can be readily seen that the directors, in distributing 100 per cent., are not dividing anything like up to the hilt. Seeing that out of this sum they carry forward in cash £23,380 to the next account, and as the September profit amounted to £14,025, and that for October to £11,057, and as those for November and December are to come, this goes a long way, not only to ensure another distribution of 100 per cent. in December, but to give sufficient funds in hand to enable even a larger division to be made. At any rate, a 200 per cent. dividend for the current year is assured, and how many companies are there who can forecast such a prospect? Now all this profit was earned without touching the Main reef. Only the South reef and the Main reef leader was mined and crushed, or practically so. Therefore the Main reef remains an asset which strengthens the position of the company.

The shareholders will desire to know for how long a period these dividends are likely to be maintained; in other words, they will want some assurance of the probable life of the mine. It is safe to say that the Wemmer is not destined to live for a great number of years. In August of last year Mr. JOHNS, the late manager of the company, came to the conclusion from *data* before him that from the South Reef and the Main Reef leader the mine had a life of eight years, but Mr. ABADIE, the present manager, is more sanguine, he being of the opinion that the improvement in the lower levels will extend it. But at that time only 40 stamps were working. Now 50 stamps are in operation, and, of course, as more stuff will be dealt with this will shorten the mine's existence; therefore, it is almost safe to say that the mine is likely to be exhausted between seven and eight years from the present time. Are the dividends likely to be maintained during that period? Now as the profits during the last two or three months have represented close upon 300 per cent. on the capital of the company there is evidently a large margin for a falling-off in the production, to bring dividends to 200 per cent. A profit of £10,000 per month will more than ensure this, and we think that profit can be maintained. Of course, in this estimate we are not reckoning the Main Reef. This reef is, as is well-known, of extremely low grade, but this could be minimised by working it simultaneously with the other bodies. But there is the probability to take into consideration that it will be found payable throughout in the lower levels. In that case, though it would diminish the profits, it would add some years to the life of the mine. No doubt the shareholders would prefer a dividend of 100 to 150 per cent. for 14 or 15 years, than a dividend of 200 per cent. for seven or eight years. At any rate, ignoring the Main reef altogether, the position of the Wemmer Company is a sound one, making it a most attractive investment.

THE RECOVERY IN THE MINING MARKET.

LORD SALISBURY has delivered his speech; the crisis has been averted, and we are all once more looking hopefully to the future. And now that we are able calmly to contemplate the past, we may ask, what does it teach us? and how can we avoid similar collapses in the future? Where are those persons now who laughed so hysterically at Mr. VAN OSS's prediction? They are silent, and their laugh has been changed into sadness. Let us for a moment recall his words: "Unless this mad boom is checked there will come a day of *dénouement*, which must lead to a collapse so huge that the entire business world will feel the shock." Where is the absurdity of it now? Supposing there had been no Lord Mayor's Show and no Lord SALISBURY's speech, what would have happened?—a panic, with consequences which we are afraid to contemplate. As it is, sufficient damage has been done, which will take a long time to repair. We all now readily admit that the boom was mad, and such madness has been overtaken by its inevitable consequences. True, the gloominess of the political atmosphere has been a cause of much of the widespread depression, but a deeper cause has been the recklessness of the weak-kneed speculator. It is he who has undermined the stability of the market, who has, as it were, overturned the pyramid on its apex. But this rash gentleman has been taught a lesson. He has many years before him to con it over, but unhappily it is too late for him to apply it to much practical advantage. He has played his last card; another will not be dealt to him. He is no longer a participator in the gamble. Others more shrewd and careful, and of a sounder standing, must take his place. But the new-comer, too, may at last lose his head. Excitement may make him reckless; but if so, he must receive a gentle remonstrance from the cooler heads to keep calm.

As we have all along predicted, the recovery has at last set in, and now that the political atmosphere is more bright and cheerful, we may look for a steady progression in the right direction. The great feature of the recent crisis has been the persistent disregard paid to the intrinsic merits of mines. But this is easily explained. Nervous holders and terrified speculators were glad to realise at any price, for they feared that a day's delay would mean a step nearer ruin. But, as we have said on previous occasions, those who deserved to suffer have suffered. The only lamentable thing is, that they have done injury to others who put too great a trust in them. Nor has the crisis been without its advantages. Apart from displaying to us where the weakness lay, and how we can best patch it up, it has offered the real, *bona fide* investor an opportunity which might not occur again for a long, long time. And, marvellous to relate, he has kept the coolest head of any. As a rule, he is the first to be affected; the earliest to display nervousness; and the readiest to sell and realise. But happily he has taken the advice tendered to him by the leading section of the Press. He has now learned to discriminate between his true and his false friends. Hitherto he has regarded the Press with suspicion, as prejudiced and tainted. Now he knows it is the bucket-shop keeper who is his bitterest enemy, and that the Press—the incorruptible section of it—is his warmest and sincerest friend. During the collapse he has benefitted by that knowledge and by that advice, for which he needs to be deeply thankful. He has bought sound shares at a price much below their intrinsic value. He is now happy that he has them. It will need a strong inducement to make him part with them; and, like the hungry boy with the hard-earned penny, he intends to hold them tightly, and not to part with them until his investment has well repaid him.

And during this time the gold industry has been establishing itself on a sounder basis. Happily, the foundation is now so secure that no madness or wildness can disturb it. The earth, calmly indifferent to man's unrest and feverishness, will yield up her treasures and hand them to him who holds forth a steady and untrembling hand. If he is too feeble to retain them, others will catch them ere they drop, and will make a more profitable use of them. There are, indeed, many so paralysed that, as they receive them, so they allow a great portion to escape them, to the enrichment of others with cooler and more calculating heads, and with a grasp that can firmly keep all that is put into it.

NOTES AND COMMENTS.

THE Barima district is likely to turn out one of the most productive in British Guiana, but it by no means follows, of course, that the Barima Gold Mining Company (Limited) will turn out one of the most successful. We have just received a copy of the report which the directors laid before the fifth ordinary general meeting at the end of September, and though it contains little evidence as to what future is awaiting the company, still the probabilities are that it will in time be a prosperous concern. It was only in February last that the shareholders voted additional capital to carry on operations until the mill is erected, and, therefore, they are not likely to see great results for some time to come. There have been many vexatious delays in getting the machinery to the mill-site, owing chiefly to difficulties in connection with transport. The contractors however, made a promise to have the railway sufficiently advanced to convey the machinery by the end of last month, and so the directors trust that the mill will be running by January next. If we were to judge solely by the following paragraph, we should anticipate, of course, a very brilliant career for the company, but experience urges us to keep cool, and to put a discount on such evidence :—"In addition to the 100 lbs. ore tested by the manager, and mentioned in his report, a portion of the same ore, weighing 130 lbs., was sent to the Government analyst, Mr. J. B. Harrison, and the report of his analysis shows that it gave per ton of 2240 lbs., 29 ounces 15 dwts. 10 grains of gold, and 4 ounces 0 dwt. 2 grains of silver. As this was taken from the reef just as it was broken down, the manager estimates that it fairly represents the average value of the ore in reef C so far as it has been worked."

THE shareholders of the Transvaal Gold Exploration and Land Company have decided by an overwhelming majority to amalgamate with the Lydenburg Mining Estates (Limited). It is difficult to see how they could have decided otherwise. Some few weeks back they appointed a committee to investigate the *pros* and *cons* of the matter, and to consequently guide them in their decision. The committee seems to have done their work thoroughly, and the result of their deliberations has been a hearty recommendation to the shareholders to agree to amalgamation. It is impossible, of course, to say whether this scheme will bring with it the success for which they all hope, but, at any rate, the evidence in favour of the great advantages likely to be derived from it is very strong, if not convincing. For instance, the evidence of the manager from the Transvaal is powerfully in favour of the amalgamation, for, far from being biased in its favour, it seemed natural, seeing it will result to his personal disadvantage, that he would counsel the company to stay where they were. The chief advantage which the amalgamation will confer will be to cheapen the cost of production. Hitherto it has been impossible to obtain coal at reasonable rates, and as it is also impossible to get sufficient motive power from water alone, it is absolutely necessary that they should seek the aid of steam power. The amalgamated company will now be able to build a railway from the coal mines at Middleburg to the immediate neighbourhood of the property. This it was impossible for the Transvaal Company itself to do. Thus with this great reduction of cost, and with the addition of 150,000 acres, a considerable portion of which is known to contain gold, the prospects of the amalgamated concern are very encouraging, and as the Transvaal possesses in the Theta reef a property of undoubted value, there is every reason why the shareholders should look to the future with a considerable degree of hope.

FEW London financiers closely interested in South African developments will not have quoted themselves, or marked the quotation by others, of the pithy sentences in which the now

British Colonial Minister, speaking in public for the first time since the new Cabinet's accession, recently gauged the vast progress attained in South Africa during comparatively recent years. The utterance comes with peculiar grace from one who is now so closely and energetically identifying himself with colonial aspirations. Mining men in all parts of the world—in British Guiana, South Africa, and Australia—are testifying to the great satisfaction with which they see so vigorous and sympathetic a control of colonial affairs exercised in London. Evidently Mr. Chamberlain is afflicted by no doubts as the permanency of the South African Gold deposits. "The product of the mines," he says, "great as it is at present, is certain to be multiplied many fold, and before many years are over the mines of the Transvaal may be rivalled, and may even be surpassed, by the mines of Mashonaland or Matabeleland, and in the train of this great, exceptional, and wonderful prosperity, in the train of the diamond digger and the miner will come a demand for labour which no man can measure—a demand for all the products of agriculture and of manufacture—in which not South Africa alone, but all the colonies, and the Mother Country itself, must have a large share." Thus happily does the right honourable gentleman forecast a successful future for one of the most progressive colonies in the Imperial union.

COLONEL GERARD SMITH, the Governor-Designate of Western Australia, was entertained on Monday evening to a banquet given in his honour at the Imperial Institute. Mr. Chamberlain was present, and delivered a pithy and incisive criticism of the conditions governing the appointment to a governorship in the colonies. Had the right honourable gentleman not so recently delivered himself of a well-judged, and, at the same time, encouraging forecast respecting the South African gold industry, he might probably have gone at some length into the new era opened up by the sudden and rapid development of West Australian mining, but as it was he contented himself with gauging in one sentence its past growth as revealed in the gold export figures, which rose from £86,000 in 1890 to £910,000 four years later. Sir William Robinson and Sir Malcolm Fraser did not, on the other hand, omit all reference to a branch of activity with which, rather than with any other and more general branch of industry, the West Australian colony is now closely associated in the public mind. Both men are bound by the prominent and honourable position they occupy in the general estimation to weigh well all references to a pursuit which may be made so dangerous a tool in the hands of unscrupulous exploiters, but both have not hesitated to speak in the highest terms of gold mining in West Australia, Sir William Robinson, speaking of the gold field as one of the richest in the world, and Sir Malcolm Fraser looking confidently forward to a "tremendous" change for the better in the colony's internal condition. Utterances of this character, coming from such influential quarters, cannot fail greatly to increase public confidence in this newly-developed branch of an old industry.

THE Harrietville Gold Mining Company is going to be reconstructed. Hitherto the results of exploratory work have been to some extent disappointing, but the property is an extensive one, and to let it go without a vigorous effort to turn its undoubted richness to profitable account would, to all appearance, be a very short-sighted policy. The imperative need for funds to carry out a proper exploration of the company's mine has been the prime cause of the proposal for reconstruction to be submitted to a forthcoming meeting. Advices from the superintendent at Harrietville have for some time past contained urgent requests for additional funds for exploratory work, and it is obvious that if these tentative operations are to be carried out with reasonable hopes of success, the company's war-chest must not be permitted to get inconveniently empty. Just as the reconstruction scheme was being formulated two telegrams came to hand, both highly satisfactory in character. The first announced that a valuable ore-body—a chute of pay-rock 50 feet long by an average width of 2 feet—had been discovered, and a supplementary discovery stated that a crushing of 28 tons had yielded 60 ounces, while the vein improved in depth. A communication of this character seems to us to carry abundant justification for a continued vigorous prosecution of works in the mine, and to render reconstruction the only wise step to take.

THE West Australian Chamber of Mines is undeniably justifying its existence. Strong representations are being continually made to the Government on matters closely affecting mining interests, and since the membership of the Chamber is for the most part composed of men whose knowledge of mining cannot easily be impugned, whereas the same knowledge does not appear to penetrate very largely into Government circles, there can be no doubt as to the highly valuable results accruing from the deliberations in the Chamber. Among the subjects which have occupied their attention, and have been earnestly pressed upon the Government, have been the provision of water in certain places affected with drought, the necessity of proceeding as quickly as possible with the deep borehole, and the imperfections naturally existing at the present time in means of communication between the lesser-known districts. These are all highly important matters and such as require to be promptly and ably dealt with if the Government is to justify its guardianship of commercial and industrial interests in the colony. At the same time it is only fair to acknowledge that, on the whole, the Government have cheerfully and readily responded to the calls made upon them, and settlers in a new country must be on their guard against expecting too much from Governmental intervention and initiative.

ADVICES to hand from India proclaim a revival in Bengal gold mining. Things have been very quiet in the country since the partial collapse in 1890, and moneyed people have only been found with difficulty to carry on vigorously the exploration works necessary to keep any gold-producing district on the advance, and even to enable it to maintain its position. Since that date what has been done has been superficial in character, and proceeded with on the assumption that 80 or 100 feet sinking was sufficient to give a crucial test to a gold field that is not without a good reputation for past production. So slender, indeed, has been the support given to gold exploitation in Bengal, that these spasmodic and feeble efforts have ceased, and further research has been relegated to the limbo of things devoutly to be desired, but for the moment beyond the pale of practical consideration. The general revival in industrial enterprise noticeable now all over the world, has encouraged those who from the first have remained staunch supporters of mining in the Bengal field to make another move towards their desired end. During the last few months a re-accession of activity has been prominently noticeable, and there are several concerns which are said by people on the spot to be starting upon a career of profitable development. In common with all friends of the Indian branch of the mining industry, we can only wish success to this new movement.

REPORTS from Gympie as to mining in that well-known gold field are not altogether favourable in character. During the month of September the field was under a depression, and the production in gold was lower than for any month since March. At the same time, shareholders interested in this portion of the globe may find consolation in the circumstance that while the return thus fell to a comparatively low figure, the aggregate of calls have shown a corresponding shrinkage. Some of the best known mines—notably the Phœnix and the Phœnix Golden Pile—escaped participation in the general decline, and, in other cases, a good quantity of development work was carried out. In fact, the mere fall in the amount of gold realised is by no means an infallible premise from which to argue to the unsatisfactory state of a gold field as a whole. Allowances of no inconsiderable breadth must be made for development work, unproductive for the present, but highly-important and even vital in its bearing on future prospects. The fluctuation noted in the case of Gympie is not a very large one, and need inspire no apprehension in the minds of persons interested. A revival may come with any new month.

FURTHER and important evidence has this week been forthcoming of the manner in which low railway freights and low wages enable our Continental competitors in the iron and steel and general metallurgical industries to compete with the manufacturers of Great Britain, alike in our own country and in neutral markets. A special committee of the Wolverhampton Chamber of Commerce has reported this week upon the subject of foreign competition. Their enquiries have extended into Germany, Belgium, and France, and their conclusions are of very much more than merely local importance. One of the chief of several useful tables shows the average working hours per week of overhand puddlers in Germany to be 60; in Belgium 65; and in England 53, the average rate of wages being 20s. to 27s. in Germany; 24s. in Belgium; and 35s. in England. The hours of underhand puddlers in England are given as 60, and their wages 22s., as compared with 16s. to 19s. in Germany, and 18s. to 21s. 6d. in Belgium. Sheet and plate rollers receive £6 in England, 40s. to 48s. in Germany, and 36s. in Belgium. In this instance it will be observed the English wage is nearly three time as great as the German, and more than three times as great as the Belgian. The same thing is manifest with regard to first grade hoop rollers, who receive £5 in England, as against 30s. to 36s. in Germany. Take again the first grade of merchant bar rollers. Their wages are:—Germany, 35s. to 40s.; Belgium, 31s.; England, 100s. The difference comes out in a very marked manner when worked out per hour. The following average rate of wages per hour are in pence for Germany, Belgium, and England respectively:—Shinglers 4d. to 5d., 4·43d., 10·9d.; forge mill rollers (first grade) 7·2d. to 8d., 3·78d., 16·34d.; merchant bar rollers (first grade) 5·72d., 20d. Railway rates are shown to be more than double, and in some case more than treble in England, compared with what they are on the Continent. Whereas in England an English trader has to pay as the average rate of carriage per ton per 100 miles (at owner's risk) 10s. 9d. for either iron, or wire, or nails, or tubes, his German competitors can in Germany move the same weight of articles the same distance for 4s. 9d., which it will be seen is less than half. The average rate of carriage per ton per 100 miles in Germany (in 10 ton lots) for "general hardware" is 6s. 6d.; in England (in ton lots) it is 22s. 6d.

ELSEWHERE we reproduce an important and encouraging circular which has been issued to the shareholders by the directors of the Waratah Gold Mines (Limited). This property is situated in the Croydon Field, North Queensland—a field which recently has been making considerable progress in the right direction. In the circular the directors draw attention to the significant fact that the ore now being raised averages in money value about £20 per ton. In consequence of the ore containing a large proportion of silver, it has been considered advisable to ship a bulk quantity to London for treatment, and a consignment of 131 tons of ore, worth, we are informed, considerably over £2000, is now in transit, and should arrive in this country during the coming month. At the present moment there are no adequate means of treating this ore to the best advantage on the Croydon Gold Field, and the directors are acting in accordance with the advice of gentlemen of large practical experience in having this ore thoroughly tested and treated before determining the class of machinery to be erected. They have little doubt that it can be treated at a small cost, and that at least 90 per cent. can be saved of the gold and silver contained in it. When the tests are completed a suitable plant will be erected on the mine in a few months. The shareholders are further informed that the company is now in a strong financial position, having about £8000 of the £15,000 working capital intact. Accompanying the circular are extracts from the reports of the mine manager and the general manager, which go to show that the mine is being vigorously developed, and that the deeper they go the better is the quality of the ore. The shares are quoted from 8s. to 8s. 6d.

THE MINING MARKET.

FRIDAY EVENING.

A panic followed by a strong recovery.—An anxious settlement brought to a favourable conclusion with three unimportant failures.—The outlook brighter, with prices closing at the best.

LORD MAYOR'S Day, 1895, will long be remembered as a momentous point in the history of the Stock Exchange. Rarely has the faith of the mining investor been put to so severe a test as during the 48 hours preceding the commencement of the mid-November settlement. Chaos reigned supreme for at least half a day. Intrinsic merit was forgotten, the bottom was out of the market, and men were tumbling one over another to throw away at any price all classes of shares, good, bad, and indifferent. On all sides one heard that the Kaffir Circus was broken up for ever; not only London, but every continental centre, was contributing to the *débâcle*. Europe was to be plunged in war, and the end of all things was at hand. As we wrote a week ago, we have all along held the conviction that the trouble was financial as distinguished from political. This, however, was not the general opinion, at any rate on Saturday last, when a further heavy fall in Consols gave rise to the wildest rumours affecting the preservation of peace. How these rumours were dispelled by Lord Salisbury's statesmanlike and pacific pronouncement, at the Guildhall banquet, is now a matter of history. Whereas on Saturday the market closed in the depths of despair, on Monday it opened with a feeling of reassurance, almost of confidence. This tone was reflected in Paris and throughout Germany, and the enthusiastic reception of the Premier's utterances by all sections of the Continental Press gave the key-note to the optimistic reaction which has since restored the equilibrium of the Bourses.

Last week we wrote:—"We cannot help thinking that many people will have cause to regret the precipitancy with which they have rushed to throw away the shares which they were scrambling to buy at higher prices a few weeks since. . . . We believe that the dealers are "bears" to a man, and as they will have to buy back sooner or later . . . a sharp change may come at any moment."

The event has borne out the accuracy of this view. When the turn came on Monday there was an early rush of "bears" anxious to cover their commitments for the fall, and support of this class has been evident day by day. It was not, however, until Thursday that the market was relieved of the persistent predictions of interested pessimists that Pay Day would bring a shoal of failures inside the House. Hardly a firm of standing, that has been known to do a large mining business, has escaped malicious rumour. The financial papers did not hesitate to set down the number of certain defaults at upwards of a dozen. The actual total has been three—one firm of jobbers and two small brokers, none of them having liabilities of sufficient importance to influence the market one way or the other. A cheer went up in the House at 3 o'clock this afternoon, the hour which marked the day's limit for further hammerings. It must not be supposed that no other cases of embarrassment exist. At least half-a-dozen firms have been compelled to seek the friendly consideration of their creditors, and it may yet happen that official failures are announced. But the effect of such events has been fully discounted. The weak accounts have been closed, or taken over by stronger men, and whether the members in question are put to the humiliation of being posted or not, will not affect the market. In the majority of instances the losses incurred would appear to come within the scope of legitimate business. There are, however, one or two sensational defaults in which this is not so, notably in the case of a young jobber, well known in amateur sporting circles, who privately declared his insolvency on Saturday, and had altogether unjustifiable speculative commitments. In this, as in other cases, the stocks open were taken over by a syndicate of creditors, who will await their opportunity of unloading. The fact that blocks of shares are hanging over the market in this manner is not unlikely to check any immediate further rise, and should not be lost sight of by prudent investors. But, after all, drawbacks of this kind are insignificant in comparison with the calamities that were predicted, and its speaks volumes for the inherent strength of the market that the recovery has been so sharp and well sustained.

It is hardly necessary in this place to recount all the political *canards* that combined to bring about the panic of Saturday. The Continental Bourses were one and all in as bad a case as the London Stock Exchange, and it was due to the prompt action of bankers and others in Paris and Vienna that the wholesale demoralisation of those markets was arrested. The immediate start to the stampede in London on Lord Mayor's Day was the throwing upon the market without limits of the holdings of a well-known Parisian Coulissier, who had been unable to carry through the arrangement of his difficulties. What specially upset everyone here was the sympathetic collapse in Railway Stocks and Foreign Bonds, which broke away so heavily on "bear" sales as to give colour to the suggestion of more than mere financial disaster. On Monday Lord Salisbury's statement on the political situation had immediate effect, and numerous buying orders were received from investors to add to the dilemma of the "bears." Business was naturally restricted by the carry-over arrangements, contango rates being not more arduous than at the preceding Settlement, though more difficulty than ever was experienced in continuing rubbish. On the better class gold shares 8 to 10 per cent. was the usual charge. Chartered were carried over at the opening at 4½d., though later on the rate increased to 10d. De Beers were negotiated at 1s. 3d. Prices were wonderfully steady all day. There was some set-back in the Street, but no pronounced weakness. Realisations on the rise and the forced closing of a small account or two caused a flat opening on Tuesday. Whilst the general carry-over was in progress business continued dull, but in the afternoon an almost buoyant tendency set in under the lead of East Rands, which had a sharp rise in Paris. There was a considerable improvement in Westralians, and the Miscellaneous market was appreciably better. Wednesday was Ticket Day, and members were more occupied with the Account than with fresh business, but an improvement in Paris had a marked effect on Gold Shares, and the dealers were buyers of Westralians all round. There were strong indications of the existence of a large "bear" position in the Miscellaneous section, with the result that prices hardened up. Thursday, being Pay Day, was naturally a day of great anxiety, but only one default was actually announced, though the difficulties of several well-known members were openly discussed. This morning witnessed the third failure, and, as already stated, other cases of embarrassment are under consideration. The general tone, however, continues hard right up to the close, and the outlook is by no means discouraging. A glance down the making-up list will show how serious were the differences to be met,

that the closing prices to-night show an almost universal gain which goes far to reward those who lent a helping hand in a crisis of exceptional severity.

South African Shares.

The output at the Witwatersrand for the month of October was announced on Monday to have amounted to 192,652 ounces, comparing with 194,764 ounces for the preceding month, and 214,473 ounces for October, 1894. The slight falling-off as compared with September may be explained by the fact that a scarcity of water interfered in some measure with the crushing. Matters have come to hand as to the visitation of the Rand with heavy rains, which have put an end to the drought. The mining reports have had little to do with prices this week, the position being influenced entirely by market considerations, as has been the case for two or three weeks past, the bulk of the transactions have taken place in a dozen or so securities, in which a free market has been ensured, either by their International character or by the action of financiers specially associated with them. In other cases quotations have been marked up and down in sympathy with the drift of the actual market. It must be recorded to the credit of Messrs. Barnato Brothers that the group of stocks bearing their name has consistently proved a medium for facile dealings, and though in the height of the panic the very heavy falls were shown in these specialities, as in others, the promptness of the rebound has testified to the powerful support accorded by the firm. For instance, Barnato Brothers were sold down to 1⅜ on Saturday, and the Consols to 2. In each case there was a recovery of 10s. before the closing. The last prices are 2 and 3⅛ respectively. It is expected that a statement of the affairs of the Consolidated Company will be published in the course of a few days, and this should have a beneficial effect upon the market. Buffels have risen $\frac{7}{16}$ on the week to $5\frac{1}{16}$, after touching 4⅜ and 5¼. Glencairns have put on $\frac{5}{16}$ to ¼, after being 3⅜, Primrose $\frac{1}{16}$ at $6\frac{7}{16}$, after 5¼, and Johnnie's Investment ⅜ at 4½, after 3⅞. There has been some wide movements in Knight's, which close rather below the best at 6¾, after being sold down to 5 on Saturday. The Robinson stocks show a good recovery. Langlaagtes are up at 5¼, after being 4¾, and Block B are $\frac{1}{16}$ higher at $2\frac{5}{16}$. Kleinfonteins dipped to 2, but close ⅜ to the good at $2\frac{7}{16}$. An immense amount of attention has been devoted to East Rands, which were not much better than during the panic, and led the recovery on Monday and Tuesday, closing below the best at $7\frac{7}{16}$. Comets are 3½, after 3¾, and St. Angelo 4⅞, after 3¾. Rand Mines were sold down to ⅝ and close unchanged on balance at 30. The dividend of £1 has been deducted from Gold Fields Deferred. Allowing for this the price shows practically no change on the week at 14¾ x.d., though on Saturday the shares changed hands ¼ cheaper. Gold Trusts went below 8, but close with a rising appearance at 9¼, which is also the price of Gold Fields Deep. Other Deep Levels have been comparatively quiet. The Eckstein Group shows a strong recovery all along the line. The gains in leading prices, as compared with the worst of the week, are 2½ in Ferreira at 19, 1¼ in City and Suburban at 7, 1¼ in Heriot at 9¼, 1⅛ in Jubilee at 9⅛, ⅝ in Langlaagtes at 7⅝, 2⅜ in Modders at 9½, and 1¼ in Wemmers at 10¼. Big movements have been shown in Kleinfontein between 3½ and 4¼, Van Ryn between 4¼ and 6⅜, Wolhuter between 7¼ and 8¾, Transvaal Gold between 5¼ and 6¾, Orion Mines between 2 and 2⅝, Durbans between 7 and 8, and Simmer Reefs between 10¼ and 11¼. The last-named prices in each case are those ruling to-day. Of the lower-priced shares much attention has been devoted to Luipaard's Vlei and Nigel Deep. The former dipped to ⅝ and rallied to $1\frac{7}{16}$, and the latter 10s. 6d. are 5s. above the worst. Land companies generally have moved with Chartered, which leave off at 5⅜, after being offered at 4⅝ on Saturday. Rhodesia Exploring are 9½, after being 8¾ lower, Oceanas $\frac{3}{16}$ higher on balance at $2\frac{1}{16}$, and New Africans ¼ above the worst at 5¼. There has been a fair amount of activity in the small Lydenburg shares, which show slight gains all round. A big business has been done in De Beers, mainly in response to Paris advices. The price is finally over a point to the good at 27, after marking 25 during the panic. Jagers are a full point better at $9\frac{1}{16}$, after dipping to 7⅞.

West Australians.

A strong recovery is shown in West Australians, which were marked down during the slump, although no large numbers of shares changed hands. Good judges consider that this market is ripe for a rise, and the fact that the dealers are short of many varieties cannot fail to influence the market at no distant date. Great Boulders were specially sold on Wednesday on the publication of a crushing that was voted unsatisfactory. As we have more than once remarked, these shares are the battle ground of two opposing cliques. We are told to expect higher prices for these, which leave off at 5⅛, as well as for True Blue, now quoted at 2⅛. Lady Loch 10s. better at 2, Hampton Plains a like fraction to the good at 4, and Hit or Miss still obtainable at par. Associated have been in active demand during the week, closing about 1⅛, after being sold down to 1¼ on Saturday. We anticipate a further recovery in these. Great Fingall Reefs show a gain of ⅛ at 2, which is also the quotation of Mainland Consols and Lake View. The supporting clique have renewed their attention to Colonial Finance, with the result that the shares are ¼ better at 4. Other Finance companies are somewhat irregular, a loss of ⅛ being shown in Exploration at 5⅛, and Exploring and Finance at 3¼, whilst Gold Fields are a like fraction better at 4. West Australian Investment have risen $\frac{1}{16}$ to $2\frac{7}{16}$, and Share Corporation are likewise appreciably better at ⅝ premium. The prices of the different Menzies properties are well maintained.

Miscellaneous.

The idea that the dealers are short of a good many shares has given a stronger tone to this department. Dealings have been active in the Indian Gold group, but prices are not appreciably different to those ruling last week. Champion Reefs are rather better at 4¾, Nundydroogs unchanged at 1⅛, and Mysore and Ooregum the turn easier, each at 3. The New Zealand group has been well supported. Waihi are ¼ better at 6¼, and there have been buyers of Waihi Silverton round 2½. The insiders predict a sharp rise here. Broken Hill Props. are ¼ better at 2¼, whilst Wentworths have lost their small rise, closing unchanged at 1⅛. Elkhorn have changed hands at 2s. 6d. Copper shares have followed the downward lead of Rio Tintos without sharing in the elasticity of their rebound. Rio Tintos were below 15 in the slump, but close practically unchanged at 16⅜. Capes have lost $\frac{1}{16}$ at 2, and Tharsis ⅛ at 4¼. Alaska Treadwell are ⅜ down at 5⅛.

British Mines.

The Cornish Share Market has remained in a quiet state during the past week, without any particular feature, but now that the financial horizon in London seems getting a trifle clearer, an improvement may shortly be looked for. The result of the Grenville meeting on Thursday seems satisfactory, and the shares would appear to be fairly cheap.—Risen: Polberro, 2s. 6d.; Fallen: Dolcoath (fully paid), 1s. 3d.; ditto (partly paid), 1s.; East Pool, 5s.; Killifreth, 8s. 9d.; Wheal Basset, 5s.; and Wheal Grenville, 5s.

STOCK EXCHANGE SETTLING DAYS.

Settling Days on the Stock Exchange are as follow:—

CONSOLS.

Monday, December 2.

STOCKS AND SHARES.

NOVEMBER.

Ticket Days.	Account Days.
Wednesday, November 27	Thursday, November 28

DECEMBER.

Saturday, December 14	Monday, December 16
Saturday, December 28	Monday, December 30

Contango Days for Mining Market:—

Monday, November 25	Thursday, December 26
Thursday, December 12	

THE RAND OUTPUT FOR OCTOBER.

THE total output from the Rand district during the past month amounts to 192,652 ounces, and shows a decrease of 2112 ounces as compared with the previous month's total, and an increase of 21,386 ounces as compared with the corresponding month of last year. The following table gives crushings to date:—

	1890	1891	1892	1893	1894	1895
	Ozs. dwt.	Ozs. dwt.	Ozs. dwt.	Ozs.	Ozs.	Ozs.
January ...	35,036 15	57,205 15	84,560 8	103,374	149,814	177,463
February ..	38,287 5	50,079 2	86,649 8	93,252	151,870	169,295
March	37,780 2	52,949 1	93,244 11	110,474	165,372	184,945
April	38,696 13	55,871 16	95,562 6	122,053	168,745	186,323
May	38,836 5½	54,673 1	99,426 6	116,911	169,773	194,581
June.....	37,149 10	56,868 1	103,252 3	122,907	168,162	200,941
July	39,456 14	54,924 10	110,279 1	126,169	167,953	199,453
August ..	42,863 11	59,070 4	107,322 3	136,069	174,977	203,573
September	45,485 19	65,601 5½	107,851 13	129,585	176,707	194,764
October ..	45,248 17	72,793 8	112,167 8	138,599	173,378	192,652
November	46,782 18	73,393 15	106,794 15	138,640	175,369	—
December	50,352 15	80,312 11	110,748 17	146,357	182,101	—
	494,817 3½	729,237 2½	1,120,868 1	1,478,473	2,025,224	1,903,989

SIDE LIGHTS ON THE LAW:

Legal Jottings on Cases in the Courts, and on Questions affecting Mining, Railway, Financial, Industrial, and allied Interests.

BY A BARRISTER.

JUDGING from a copy of a judgment delivered on the 26th October last by Mr. Justice Sherriff, in the Supreme Court of British Guiana, sitting in his appellate jurisdiction in the case of "The Barima Development Syndicate (Limited) against J. C. Menzies," the Legislature has got the matter of appeals somewhat into a boggle. The decision appealed from was given by a Gold Commissioner. By the Gold Regulations of 1892 an appeal on questions of law is given to the Court of Review, which is defined and means the Supreme Court of Civil Justice sitting as a Court of Review, under the provisions of ordinance No. 5 of the year 1868, or any ordinance amending the same. By an ordinance of 1893 the Supreme Court of Civil Justice seems to have ceased to exist, and an entirely new Court created, and the Judge held there was no longer a Supreme Court of Civil Justice, and sitting as he did under the ordinance of 1893, he could not entertain the appeal. British Guiana is evidently ambitious to emulate the mother country.

OCCUPIERS of factories should not forget that a new Factory Act comes into operation on the first day of the new year. The Factory Acts are to be applied to laundries, and certain of the provisions to docks, wharves, quays, and warehouses; and so far as relates to the process of loading or unloading therefrom or thereto to all machinery and plant used in that process. They will also affect all premises on which machinery worked by steam, water, or other mechanical power is temporarily used for the purpose of the construction of a building, or any structural work in connection with a building. But not only this, a Court of Summary Jurisdiction, on complaint of an inspector, will have power, on being satisfied that any place used as a factory or as a workshop, or as part of either, is in such a condition as to be dangerous to life or limb, to prevent the place being used until the necessary works are executed. If a machine is in such a condition as to be dangerous, the Court may in like manner prevent its being used until altered, and if there is any imminent danger to life, the Court may make the order at once on an *ex parte* application made by the inspector. Contravention of an order will be the subject of a penalty. Defendants prosecuted for any offence under the Factory Acts are to be admissible as witnesses on their own behalf.

ATTENTION has already been directed in this column to the decision of the Court of Appeal, in which it upheld the validity of debentures forming a floating charge upon the property of a Limited company. The Court in that case construed Section 17 of the Bills of Sale Act, 1882, holding that such debentures issued by any incorporated company, for the registration of which statutory provision had already been made by the Companies Clauses Act, 1845, or the Companies Act, 1862, did not require registration as a bill of sale. This was hailed with delight by trading companies generally. Mr. Justice Williams' decision the other day in the Coal Co-operative Society's case is a knock-down blow for societies established under the Industrial and Provident Societies Act, 1862. There is no statutory provision for registration of debentures of such a society, and consequently the Judge held that debentures issued by Industrial and Provident Societies required registration as bills of sale.

THE light and airy time that auditors have hitherto enjoyed is fast becoming one of history upon which they will look back with regret. In the matter of the London and General Bank, the Court of Appeal supported Mr. Justice Vaughan Williams in his decision that an auditor of a banking company, appointed in pursuance of Section 7 of the Companies Act, 1879, and who was spoken of as an officer in the Articles of Association of the company, was an officer within the meaning of Section 10 of the Companies (Winding-up) Act, 1870, and as such was liable to have his conduct examined into, and if found guilty of misfeasance or breach of trust, may be ordered to pay compensation in respect thereof. Having driven the nail so far into the coffin of the auditors of banking companies, Mr. Justice Williams has proceeded to make the principle of general application, and has now held that where the Articles of Association are, so far as they relate to accounts, the same in substance as there to be found in Table A to the Companies Act, 1862, the auditor is an officer within the above-ment oned section of the Winding-up Act

THE METAL MARKETS.

LONDON METAL MARKET.

THE METAL MARKET, LONDON, NOVEMBER 15.

Copper.

THE g.m.b. market has been characterised this week by very large transactions, the better tone on the Stock Exchange, and greater confidence generally, leading to an active speculative demand, which caused an advance from £43 10s. s.c. to £44 7s. 6d., and though towards the close the tone is not quite so robust, the final values are only 5s. below the best. The somewhat easier tendency of American prices has been counteracted by a very fair enquiry from consumers, and the trade generally is looking for good mid-monthly statistics. The course of the speculative market was as follows:—On Monday a considerable quantity of g.m.b.'s changed hands at advancing values, s.c. being done at £43 10s. to £43 16s. 3d., and three months from £43 18s. 9d. to £44 5s. Tuesday's business was still more active, and values were carried up to £44 and £44 7s. 7d., spot and forward respectively. Wednesday brought a further increase in the volume of business, and a fresh advance in price, £44 7s. 6d. being attained for s.c. and £44 17s. 6d. for three months. Yesterday things were quieter, the cash value easing off to £44 5s., and three months to £44 11s. 3d., and to-day, after business at £44 3s. 9d. and £44 2s. 6d. s.c., and £44 12s. 6d. to £44 10s. three months, the two positions close, in steady tendency, at £44 2s. 6d. and £44 10s. respectively.

Tin

opened in quiet mood and without salient feature, a small business taking place at £65 3s. 9d. s.c. Straits tin, and £65 15s. to £65 13s. 9d. three months. On Tuesday spot was dealt in at £65 2s. 6d. to £65 6s. 3d. and forward at £65 12s. 6d. The New York report on Wednesday was firmer, and our market improved to £65 13s. 9d. spot and £66 5s. forward, the advance continuing on Thursday, when £65 17s. 6d. was paid for s.c. and £66 7s. 6d. for three months, but the day closed easier again at £66 13s. 9d. s.c. To-day's market was quite flat and values dropped considerably, cash Straits changing hands as low as £65 6s. 3d. and three months as low as £65 16s. 3d. The close to-night is flat at £65 5s. to £65 7s. 6d. s.c. and £65 15s. to £65 17s. 6d. three months.

In the Dutch Market a steady rise has taken place, the opening being at fl 39½ s.c. and fl 39⅜ three months, and the close this morning at fl 39½ s.c. and fl 39¾ three months Billiton, whilst Banca has also risen fl ½—viz., to fl 392.

Pig Iron.

The Glasgow market, after opening with a drop of 2d., *i.e.*, from 46s. 4d. to 46s. 2d. s.c., advanced rapidly to 47s. 2d. s.c., this highest price being realised on Thursday. To-day, after transactions down to 46s. 6½d. s.c., the market closed steady at 46s. 6¾d. buyers, with hematite at 47s. 9½d., and Middlesbrough at 38s. 1d. The shipments from Scotland last week are advised as about 5400 tons, as against 6000 tons in the parallel period of 1894.

Lead

has been again in active request by users, and a good business has been done at advancing prices, the quantity of prompt stuff available being very small. The close is firm at £11 8s. 9d. to £11 10s. soft foreign, and £11 10s. to £11 12s. 6d. English.

Spelter

is quiet but steady, and without special feature, closing at £15 3s. 9d. to £15 5s. ordinaries, and £15 6s. 3d. to £15 7s. 6d. specials.

Antimony.

There is nothing new to record. The values are steady at £31.

Quicksilver continues quiet at £7 7s. 6d. firsts, & £7 6s. seconds.

The following are to-night's (November 15) prices of metals:—

		£	s.	d.		£	s.	d.
Copper.								
Tough cake and ingot	...	47	15	0	.....	48	5	0
Best selected ...	...	48	10	0	.....	49	0	0
Electrolytic Copper ...	...	51	0	0	.....	52	0	0
Sheets and sheathing	...		—		.....	54	0	0
Flat bottoms ...	...		—		.....	55	0	0
Chili bars	spot, & 3 months respectively	44	7	6	.....	44	10	0
Good merchantable, Copper tubes, seamless	... ...		—		.....	0	0	7½
Alloys.								
BRASS: Wire	... ...		—		.....	0	0	5¼
,, Tubes (solid drawn)	... ...		—		.....	0	0	6¼
,, Sheets	... ...		—		.....	0	0	6
PHOSPHOR BRONZE: Alloys II. ...			—		.....	78	0	0
,, III. or	Cog Wheel Brand		—		.....	81	0	0
,, ,, VII. ...			—		.....	83	0	0
,, ,, XI. ...			—		.....	78	0	0
,, ,, Vulcan brand A1 ...			—		.....	72	0	0
DURO METAL			—		.....	73	0	0
BULL'S METAL			—		.....	65	0	0
Ferrobronze (Vivian's).								
Ingots	per lb.	0	0	5¾	.....		—	
Ordinary sheets, plates, bolts and bars...		0	0	6¾	.....		—	
Screw bolts and nuts...		0	0	8¾	.....		—	
Pump rods, plain		0	0	7¼	.....		—	
,, finished		0	0	10¾	.....		—	
DELTA METAL: No. 4 (per ton)			—		.....		—	
,, Sheets and plates (per lb.)			—		.....		—	
,, Bars, round, square, flat (per lb.) ...			—		.....		—	
,, ,, hexagon (per lb.)			—		.....		—	
Tin.								
English, ingots, f.o.b.			—		.....	69	0	0
,, bars			—		.....	70	0	0
,, refined			—		.....	71	0	0
Straits, spot and 3 months respectively ...		65	7	6	.....	65	17	6
Australian spot, and three months respectively ...		66	5	0	.....	66	15	0
Banca ,, (in Holland)		66	7	6	.....	66	10	0
TIN PLATES: Charcoal, best quality ...	per box	0	13	6	.....	0	15	6
,, ,, ordinary		0	11	0	.....	0	11	6
,, Coke, best quality		0	10	3	.....	0	10	6
,, ,, ordinary			—		.....	0	9	10½

These prices of tinplates are f.o.b. at Swansea: at Liverpool 6d. per box more.

Iron.								
Pig, G.M.B., f.o.b., Clyde, spot			—		.....	2	6	6½
,, Scotch pig, No. 1 Gartsherrie...			—		.....	2	11	6
,, ,, Coltness			—		.....	2	14	0
,, ,, Clyde			—		.....	2	11	6
,, ,, Govan			—		.....	2	7	9
Bars, Welsh, f.o.b. Wales			—		.....	5	5	0
Plates ,, ,, ...			—		.....	6	3	9
Bars, Staffordshire, at works			—		.....	5	10	0
Sheets ,, ,, ...		7	5	0	.....	7	10	0
Plates ,, ,, ...			—		.....	6	10	0
Hoops ,, ,, ...		5	17	6	.....	6	0	0
Ship plates, Middlesborough			—		.....	5	0	0
STEEL: English spring			—		.....	16	0	0
,, ,, cast		28	0	0	.....	52	0	0
,, Rails at works, according to section ...		4	2	6	.....	4	10	0
Lead.								
Spanish or soft foreign		11	8	9	.....	11	10	0
English pig, common		11	10	0	.....	11	12	6
,, L.B.			—		.....	12	0	0
,, sheet and bar lead			—		.....	12	10	0
,, pipe			—		.....	13	0	0
,, red			—		.....	14	5	0
,, white			—		.....	17	0	0
,, patent shot			—		.....	15	10	0
Spelter.								
Silesian ordinary brands		15	3	9	.....	15	5	0
,, special brands		15	6	3	.....	15	7	6
English Swansea			—		.....	16	0	0
Sheet Zinc		18	15	0	.....	19	0	0
Antimony.								
Antimony			—		.....	31	0	0
Quicksilver.								
Flasks, 75 lbs. warrants		7	6	0	.....	7	7	6
Manganese.						per unit.		
Ore, c.i.f., U.K. ports 1st quality, 50 per cent, and upwards ...		0	0	11	.....	0	0	11½
2nd ,, 47 per cent. to 50 per cent.		0	0	10	.....	0	0	11
3rd ,, 40 ,, 47 per cent.		0	0	8	.....	0	0	10
Aluminium.								
98-99½ per cent., (guaranteed 98 per cent. min.) in ingots (1 cwt. lots)	Per lb.	0	1	6½	.....	0	1	7
do do (1 ton lots)		0	1	5	.....	0	1	6
Nickel.								
98-99 per cent. guarantee		0	1	1	.....	0	1	3

N.B.—In our last week's price list the quotations for Spanish and Australian Tin were inadvertently given £1 too high. The correct prices were Straits s.c. £66 5s., three months £65 15s.; Australian £66 5s. and £66 15s. respectively.

"THE MINING JOURNAL" SHARE LIST.

ABBREVIATIONS AND REFERENCES.—The following are the significations of the abbreviations and references which occur in the Share List:—*Ay*, Antimony; *A*, Arsenic; *Bl*, Blende; *Bz*, Borax; *C*, Copper; *D*, Diamonds; *G*, Gold; *I*, Iron; *L*, Lead; *M*, Mundic; *N*, Nitrates; *P*, Phosphates; *Q*, Quicksilver; *R*, Ruby; *S*, Silver; *S-l*, Silver-lead; *Sul*, Sulphur; *T*, Tin; and *Z*, Zinc. * in the "Amount of Share" column of British Mines signifies that the mine is conducted on "Cost Book" principles; † in the "Head Office" column of African Mines signifies that the address given is not that of the head office, but of a sub, or transfer office; and ‡, following the names of African Mines, signifies that they are subject to the Limited Liability Law of the South African Republic.

"*" The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share Dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that, while our Share List will almost invariably be found correct, we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

AFRICAN MINES.

Name.	Closing Price, Nov. 15, 1895	Closing Price Nov 8, 1895.	Am't. of Share	When last XD and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£		£ s. d.			
Abercorn Reef ...*G*	-/9 1/3	-/9 1/3	5/-	—	0 4 0	—	Millwood	16, Tokenhouse Yard
Abbott's Con. Reefs	1⅛	⅞ 1⅛	1 0	—	1 0 0	—	De Kaap	Broad Street Avenue.
African Alluvial ...	1⅜ 1⅝	1⅛ 1⅜	1 0	—	1 0 0	130,000	Mozambiq	11, Poultry.
" Alluvial ..	7/16 9/16	10/6 11/6	1 0	—	0 3 6	20,000	"	"
" Coal	5/ 5/6	5/- 5/6	1 0	—	0 16 6	300,000	Middlebrg	19, St. Swithin's-lane
" Estates ...	2½ 2¾	2½ 2¾	1 0	10 p.c. Sept. 95	1 0 0	438,603	"	4, Drapers-gardens.
" Consolid't	3/6 4/6	3/6 4/6	1 0	—	0 17 0	200,000	"	3, Copthall-buildings
" Gold Con.	3/ 3/6	3/ 4/	10/	20 p.c. Jan. '95	0 8 0	300,000	Mossel By	16, Tokenhouse-yard
" Gold Ryco.	1⅝ 1⅞	1⅝ 1⅞	1 0	2/ Oct. 16 '95	1 0 0	175,000	—	23, College Hill.
Afrikander	1¾ 1⅞	1½ 1¾	1 0	—	1 0 0	40,000	Transvaal.	"
Agnes Block..... *G*	⅜ ⅝	5/16 7/16	1 0	—	1 0 0	78,507	"	54, Old Broad-street
Alexandra Estate *G*	⅛ ⅜	⅛ ⅜	1 0	—	1 0 0	225,000	Rand	Warnford Court, EC.
Anglo-French Exp.	4¾ 5	4 4¾	5 0	15% Aug 29 '95	5 0 0	30,300	S. Africa	170, Winchester Ho.
" Matabeleland	3¾ 4¼	4 5/16 4 7/16	1 0	—	1 0 0	39,750	Matabld.	Winchester House.
Appantoo ..... *G*	—	—	1 0	—	1 0 0	77,585	West Cost	Dashwood House.
Aurora ..... *G*	1¾ 1⅞	1¾ 1¾	1 0	5% Mar. '93	1 0 0	65,000	Rand	8, Old Jewry. ‡
" West United	1⅜ 1⅞	1½ 1¾	1 0	—	1 0 0	100,000	"	1, Crosby Square.
Balkis Eerstelings *G*	4/ 4/6	3/6 4/	10/	—	0 10 0	520,000	Transvaal.	85, Gracechurch-st.
" Land	7/3 7/9	7/ 7/6	10/	—	0 10 0	520,000	"	"
Balmoral M. R. ...*G*	2¾ 3¼	2¾ 3¼	1 0	—	1 0 0	158,750	Driefontin	7, Lothbury.
Banket..... *G*	7/6 8/6	7/6 8/6	1 0	—	1 0 0	200,000	Rand	Johannesburg.
Bantjes Consol ...*G*	3¾ 3⅝	3½ 3⅝	1 0	rts Sep 24 '95	1 0 0	83,000	"	Warnford-court. ‡
Barnato Bank	1 15/16 2 1/16	1⅞ 2	—	—	—	—	"	"
" Consol ...	2 1/16 3 5/16	2⅞ 3	1 0	—	1 0 0	1,000,000	"	1, Drapers gardens.
Barrett..... ...*G*	12/6 13/6	11/6 15/6	10/	—	0 9 0	207,495	De Kaap	17, Basinghall-street
Bechuanaland Exp	1⅞ 2	1¾ 1⅞	1 0	rts Jy 24 '95	1 0 0	400,000	Bechuana.	19, St. Swithin's-lane.
" Trad g Assoc.	1⅜ 1⅝	1⅜ 1⅝	1 0	10 p c May, 95	1 0 0	100,000	"	"
Ben Trovato	⅞ 1	⅞ 1	—	—	—	—	"	"
Big Golden Quarry	1/ 1/6	1/6 2/	5/-	—	0 5 0	483,226	Kaap Rivr	4, Bishopsgte. st. Wn.
Block "B" Lang.	2¼ 2⅝	1⅜ 1⅞	1 0	—	1 0 0	535,000	Rand	8, Princes-st, E.C. ‡
Bonanza	2¼ 2¾	1⅞ 2	1 0	—	1 0 0	2,000	Turffont'n	120, Bishopsgate-st.
Boovsen Land ..*G*	—	—	1 0	—	0 12 0	95,000	Transvaal.	4, Tokenhouse-bldg
Brand Kumalu.....	—	—	1 0	—	1 0 0	50,000	—	10, St. Helen's Place
Brit. S. A. Char. ...	8⅛ 5⅞	5⅞ 5⅝	1 0	rts Jy 26 '95	1 0 0	2,000,000	S. Africa	15, St. Swithin's-lane
Buffelsdoorn..... *G*	5 5¼	4½ 4¾	1 0	16/- Oct. '95	1 0 0	250,000	Potchefstr	7, Lothbury.
" Central ...	¾ 1	¾ 1	1 0	—	1 0 0	—	—	—
" Consolidated	1¼ 1⅜	1¼ 1⅜	1 0	—	1 0 0	225,000	—	Warnford Court
Bulawayo Synd. ...	3¾ 4	3¾ 4	1 0	—	1 0 0	12,000	Matabld.	10, Helen's Place.
Cape Asbestos	1⅝ 1⅞	1⅝ 1⅞	1 0	—	1 0 0	50,311	Orange Rv	19, St. Swithin's-lane
" Copper .....*C*	2¾ 2⅞	2¾ 3⅛	2 0	1/3 Jun 12, '95	2 0 0	300,000	Cape Col.	9, Queen-street-place,
" 6 % Pref, ...	2¼ 2½	2¼ 2⅜	2 0	1/3 Jun 12, '95	2 0 0	45,000	"	" "
Cassel Coal.....	1⅜ 1⅝	1½ 1¾	1 0	10pc July '95	1 0 0	75,000	Johanbrg.	99, Cannon-street.
Cen. de Kaap	2/ 2/6	2/9 3/3	5/-	—	0 2 6	—	De Kaap	Palmerston Buildgs.
Cen. Montrose... *G*	8/8 9/6	8/8 9/6	1 0	—	0 18 6	69,000	Transvaal.	15, George st. Mn. Ho.
Champ d'Or..... *G*	2¼ 2⅝	2¼ 2⅝	1 0	4/- Jan. 31 '95	1 0 0	116,016	Rand	8, Old Jewry, E.C.
charterland G.F ...	1 5/16 1 7/16	⅞ 1	1 0	—	1 0 0	150,000	—	2, Salter's Hall Court
chimes West	1⅞ 2⅛	1⅞ 2⅛	1 0	—	1 0 0	150,000	—	8, Old Jewry, E C.
City and Sub. N.W *G*	5¾ 6	5¾ 5⅞	4 0	10/- June '95	4 0 0	340,000	Rand	96, Gresham Ho., E.C
Coetzeestroom ...*G*	8/ 9/	8/ 9/	5/-	—	0 8 0	140,000	De Kaap	105, Leadenhall-street
Con. Buitfontein *D*	28/ 30/	29/6 30/5	1 0	3¾ % Sept. '94	1 0 0	721,500	Griqualnd	62, Lombard-st.
Con. Deep Levels *G*	5¾ 5¾	4⅞ 5⅛	1 0	4/- Jy 11 '95	1 0 0	187,250	Transvaal	30, St. Swithin's-lane
Con. G. Fields S A.	14⅝ 14⅞ xd	15⅜ 15¾	1 0	20/ Nov. 14 '95	1 0 0	1,250,000	S. Africa	8, Old Jewry,
Do. 6 % Pref.	25/- 25/6	25/ 26/6	1 0	7 1-5d June '95	1 0 0	1,243,999	"	"
Do. 5½ % Deben...	111 112	111 112	5 0	5¾ Oct. '95	5 0 0	600,000	"	"
Crescent-Matabele	5 6	5½ 6½	—	—	—	—	—	—
Crown Deep .....*G*	9½ 10⅝	10¼ 11⅜	1 0	—	1 0 0	250,000	Rand	120, Bishopsgate-st.
" Reef .. ..*G*	11⅞ 11⅝	10⅜ 10⅞	1 0	5/- Jy 11 '95	1 0 0	120,000	"	"
DeBeers Consol. *D*	26⅜ 27⅛	20⅞ 26⅛	5 0	12/6 Jy 11 '95	5 0 0	789,791	Kimberl'y	62, Lombard-street.
Do. 5 % 1st Deb....	108 109	103 109	—	5 % Jy 11, '95	—	£3,500000	"	"
Do. 5½ % Bul. Ob	103⅛ 104¾	103⅛ 104¾	—	5½ % Oct. 95	—	720,000	"	"
Doornkop	5/6 6/6	6/6 7/6	1 0	—	1 0 0	250,000	Doornkop	Warnford Court
Driefontein	2¾ 3	2¾ 1½	1 0	—	1 0 0	175,000	—	Winchester Ho,
Durban Roodept. *G*	7⅞ 8⅛	7¼ 7⅛	1 0	3/- Sep. 27 '95	1 0 0	£125,000	Rand	28, Leadenhall-bldgs
" Deep.....	4¾ 4¾	4⅜ 4⅞	—	—	—	—	—	—
Eastleigh .....*G*	1 5/16 1 3/16	1 5/16 1 1/16	1 0	—	1 0 0	240,000	Klerksdrp	Winchester House,
East Rand.....*G*	7½ 7¾	6 5/16 6 7/16	1 0	—	1 0 0	570,000	Rand	170, Winchester-ho.
Evelyn .....*G*	1 1⅛	1 1⅛	1 0	10% Jan. '89	1 0 0	66,000	"	28, Old Jewry, E.C.
Exploration	4⅜ 4¾	4⅜ 5⅛	1 0	1/- Dec. 28 '94	1 0 0	148,000	S. Africa	30, 8, Swithin's-in. ‡
Ferreira .....*G*	18¾ 18¾	16½ 17⅛	1 0	13/ Jy 26 '95	1 0 0	45,000	Rand	120, Bishopsgt st. Wn ‡
Forbes Reef (Nw) *G*	⅛ ⅜	⅜ ⅜	1 0	—	1 0 0	105,000	De Kaap	45-8, Leadenhall-st.
Geldenhuis Deep *G*	7¾ 7¾	6¾ 7¾	1 0	—	1 0 0	265,000	Transvaal.	30, St. Swithin's-lane.
Geldenhuis Est. *G*	5¾ 5⅞	4¾ 5	1 0	6/- Jy 26 '95	1 0 0	187,500	Rand	120, Bishopsgt st. Wn ‡
" Main Reef	1 5/16 1 7/16	1¼ 1⅜	1 0	1/ Sep. 27 95	1 0 0	150,000	"	Warnford Court, E.C
George and May *G*	1 1/16 1 3/16	1 5/16 1 1/16	1 0	—	1 0 0	112,750	"	7, Great St. Helen's,
" Goch ...*G*	2¾ 2⅜	2 5/16 2 7/16	1 0	—	1 0 0	100,000	"	Johannesburg.
Ginsberg .....*G*	1½ 1¾	1 1⅛	1 0	—	1 0 0	130,000	Driefon .	Warnford Court, E.C. ‡
Glencairn .....*G*	3 15/16 4 1/16	3½ 3¾	1 0	15 Jy 26 '95	1 0 0	200,000	Rand	2, Drapers-gardens.
Gold Coast Devel.	7/ 8/	7/- 8/-	—	—	—	—	—	11, Queen Victoria-st
" Estates T....*G*	⅜ ⅝	9/16 11/16	1 0	15% Dec. '89	0 10 0	130,000	Transvaal.	48, "
Gld. Fls. Deep...*G*	9¾ 9⅞	9⅞ 10¾	1 0	—	1 0 0	600,000	S. Africa	8, Old Jewry.
G.F. of Lydenb'rg	3¾ 3¾	3 4	1 0	—	—	—	Lydenb'rg	—
G. F. of Mashonld.	⅛ ⅜	⅜ ⅝	1 0	—	1 0 0	200,000	Mashonld.	19, St. Swithin's-ln.
Graskop .....*G*	5/6 6/	4/3 4/9	5/-	2½ % Mar. '92.	0 5 0	400,000	Lydenburg	2, Tokenhouse Bldgs
Griqualand W....*D*	8 8¾	8 8¾	10 0	2 % Sept. '94	10 0 0	105,700	Transvaal.	62, Lombard-street
Guy Fawkes..... *G*	⅝ ⅞	⅜ 1⅛	10/-	—	0 10 0	24,000	Manica.....	Broad-st. Avenue
Gwelo Explortn.	4/3 4/9	4/- 4/6	1 0	—	0 10 0	—	Matabeleld	18, Bishopsgate st.
Harmony (Pref) *G*	6/8 7/6	6/6 7/6	1 0	—	1 0 0	260,000	—	73½, Gracechurch-st.
Heidelbg. Est. Ex.	2⅝ 2⅞	3 5/16 3 7/16	1 0	—	—	—	Heildelbg.	—
Henderson's Trans	2 15/16 2 15/16	2 9/16 2 11/16	1 0	—	1 0 0	250,000	Zoutpan'bg	85, Gracechurch st.
Henry Nourse ...*G*	6⅞ 6¾	6½ 5¾	1 0	—	1 0 0	100,000	De Kaap ...	Warnford-court.
Joe's Reef .....*G*	7/16 7/16	5/16 7/16	1 0	—	1 0 0	57,464	"	21, Mincing Lane.
Johannesburg G.F	7/ 8/	11/- 12/-	1 0	—	1 0 0	99,537	Johanburg	31, Lombard-st., E.C.
" Invest.	47/16 49/16	4½ 4 9/16	1 0	20 % Oct. '95	1 0 0	650,000	—	7, Lothbury.
Johannesburg Por	8¾ 8¾	8¾ 9¼	1 0	12½ % Nov., '93	1 0 0	21,000	Rand.....	Johannesburg.
Jubilee .....*G*	9 9⅛	8 8⅜	1 0	30 % Jy 26 '95	1 0 0	30,000	"	8, Old Jewry. †
Jumpers .....*G*	7⅛ 7¼	7 7¼	1 0	25 % Aug 29 '95	1 0 0	100,000	"	120, Bishopsgt st, Wn ‡
Kimberley .. ..*D*	⅜ ⅝ pm	⅜ ⅝ pm	1 0	—	0 10 0	98,672	Kimberley	19, Finsbury circus.
" Rdpt....	1⅞ 2⅛	2¼ 2¾	1 0	—	1 0 0	125,008	"	2, Drapers-gardens.
Klerksdorp	15/8 15/8	11/ 12/	10/-	—	0 9 0	400,000	Klerksdorp	110, Cannon St.
Koffyfontein.....*D*	⅛ ¾	9/16 11/16	1 0	—	1 0 0	125,000	Jacobsdaal	120, Bishopsgt st. Wn
Langlaagte Est. *G*	5¾ 6	5⅛ 5¾	1 0	5/- Jy 11 '95	1 0 0	470,000	Rand.....	59, HolbornViaduct
Do, Royal	1⅞ 2⅛	1⅞ 2⅛	1 0	rts. Mar. 6 '95	1 0 0	100,000	"	2, Drapers-gardens.
Lionsdale	8/6 9/6	5/6 9/6	1 0	—	1 0 0	115,000	Lydenburg	85, Gracechurch-st.
Lisbon-Berlyn ... *G*	7/3 7/9	5/9 6/3	2/6	—	0 2 6	883,233	"	110, Cannon-street
Lo Magunda..... ...	2¾ 2⅛	2⅜ 2⅞	1 0	—	1 0 0	120,000	—	8, Old Jewry
Lon. Paris Fin & M.	1¾ 1⅞	1⅝ 1⅞	1 0	—	1 0 0	500,000	—	5, Lothbury.
London & S. A. Ex.	14 14½	14 14½	10/	4/- Sep. 27 '95	0 10 0	100,000	S. Africa ...	19, Finsbury-circus.
Lower Roodepoort	2/6 3/6	2/6 3/6	1 0	—	1 0 0	150,000	Vlakfonte	8, Old Jewry, E.C.
Luipaards Viei Est.	1 5/16 1 3/16	⅞ 1	1 0	6% Mar. '90	1 0 0	319,093	Rand..... ...	Warnford-court. ‡
Lydenburg Est. ...	1⅝ 1⅞	1⅝ 1⅜	1 0	—	—	—	—	—
Main Reef (New) *G*	1¾ 1⅜	1⅜ 1⅜	1 0	—	1 0 0	111,500	Rand.....	15, George St., MnH
Mashon. Agency...	2⅛ 2⅝	2⅛ 2¼	1 0	—	1 0 0	100,000	Mashonald	8, Old Jewry, E.C.
" Central ..	1⅝ 1⅜	1⅝ 1⅜	1 0	—	—	150,000	"	"
Massi Kessi	9/8 10/8	9/ 1./	10/	—	0 7 6	60,000	Manica.....	Broad Street Avenue
Matabeleld G. R'f	4¾ 4¾	4¼ 4¾	1 0	—	1 0 0	110,000	Matabeleld	3, Copthall-buildings.
May Con. (New) *G*	3 5/16 3 7/16	2 15/16 3 1/16 xd	1 0	2/- Oct 30 '95	1 0 0	236,500	Rand.....	4, Lothbury. ‡
Metropolitan (M) *G*	1⅞ 2	1¾ 2	1 0	—	1 0 0	75,020	"	1, Crosby Square. ‡
Meyer & Charl....*G*	6⅜ 6⅝	6⅜ 6⅝	1 0	2½ % Jy 11 '95	1 0 0	71,687	"	120, Bishopsgt-st. Wn ‡
Middleburg Coal...	4/6 5/6	4/6 5/6	—	—	—	—	—	—
Middle Viei	1 1¼	1 1¼	—	—	—	—	—	—
Minerva	1⅞ 2⅛	1¾ 2	—	—	1 0 0	150,000	Rand.....	4, Drapers-gardens.
Modderfontein.. *G*	9⅜ 9⅝	8 8¼	1 0	—	1 0 0	200,000	"	Warnford-court. ‡
" "B" Extension.	2⅜ 2⅝	2 2⅛	—	—	—	—	—	—
Montrose..... *G*	1 5/16 1 7/16	1 5/16 1 9/16	1 0	2/- Feb. '90	1 0 0	70,000	De Kaap ...	65, New Broad-street
Moodies G. & E....*G*	⅞ 1	15/16 15/16	1 0	-/4 May '90	1 0 0	240,000	"	8, Old Jewry. ‡
Mozambique.....	1 7/16 1 9/16	1⅛ 1⅜	1 0	—	1 0 0	400,000	S.E. Africa	Broad-street House,
Namaqua .....*C*	1¼ 1⅜	1⅛ 1⅜	2 0	2/6 July '91	2 0 0	94,331	Namaquald	24, Leadenhall-bldg.
New African	⅜ 5⅜	5 5⅛	1 0	—	1 0 0	190,000	—	53, Cornhill.
N. Belgium Land...	11/16 12/6	11/ 12/	1 0	—	0 17 0	167,462	Waterberg.	53, Cornhill.
New Chimes..... *G*	2½ 2¾	2½ 2⅜	1 0	15 pc Aug. '95	1 0 0	100,000	Rand.....	8, Old Jewry, E.C
" Clewer Estate	2¾ 3	2¾ 2⅝	1 0	10% Feb. 28 '95	1 0 0	100,000	Lydenburg	120, Bishopsgt st, Wn ‡
" Comet	3⅜ 3⅝	2½ 2¾	1 0	—	1 0 0	175,000	Heidelburg	Winchester-house.
" Cresus..... *G*	2 5/16 2 3/16	1⅞ 2	1 0	rts Apr 17 '95	1 0 0	255,000	Langlaagte	120, Bishopsgt. st. Wn
" Gordon.....*D*	5/6 6/6	5/ 6/	1 0	5 % Dec. '89	1 0 0	404,344	Griqualand	110, Cannon-street.
" Heriot .....*G*	9½ 10	8¾ 9¾ xd	1 0	2/- Oct 30 '95	1 0 0	88,750	Rand.....	96, Gresham Ho EC
" Jagersf. ...*D*	9 9¼	7⅞ 8½	5 0	10/ Oct. 16 '95	5 0 0	100,000	Transvaal.	5, Copthall-buildings
" Kleinfontein *G*	4½ 4⅝	3⅞ 4¼	1 0	12½ pc Mar, '95	1 0 0	82,500	Rand.....	Winchester House
" Louis D'Or.. *G*	1/6 2/6	1/ 2/	1 0	—	1 0 0	—	—	53, New Broad-street
" M das	3¾ 3¾	2⅞ 3⅛	1 0	—	1 0 0	150,000	Mid'le Viei	120, Bishopsgt-st, Wn
" Primrose ...*G*	6⅜ 6½	5¾ 6	1 0	25pc. June '95	1 0 0	276,750	Rand.....	2, Draper's-gardens.
" Rand.....	1 5/16 1 5/16 pm	1 5/16 1 5/16 pm	1 0	—	1 0 0	110,000	"	Bartholomew-house
" Rietfontein *G*	3⅜ 3⅝	3¾ 3¾	1 0	—	1 0 0	160,000	"	Warnford-st., E.C.
" S. Augustine *D*	9/ 10/	9/6 10/6	1 0	—	0 19 6	299,137	Griqu'ld W	30-1, St. Swithin's-in
" Spes Bona...*G*	1⅜ 1⅝	1⅜ 1⅝	1 0	—	1 0 0	113,701	Rand.....	24, N. John-st., L'pl
" Steyn Estate	1⅛ 1⅜	1 5/16 1 7/16	1 0	—	1 0 0	125,000	Heidelberg	19, Bury Street, E.C
" Virginia ... *G*	1/8 2/8	2/ 3/	10/	—	0 10 0	45,338	Transvaal.	28, Budge-row, E. C

AFRICAN MINES—(*Continued*).

Name.	Closing Price, Nov. 15, 1895	Closing Price, Nov. 8, 1895.	Am't. of Share	When last XD and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£		£ s. d.			
Nigel .....*G*	5 5¼	5¼ 5⅜	1 0	rts Aug 10 '95	1 0 0	160,000	Rand.....	95, Gresham Ho., E.C.
" Deep .....*G*	2⅜ 3¼	2¾ 3	1 0	—	1 0 0	195,000	Heidelberg	8, Old Jewry.
" Extension ...	7/6 8/	7/ 8/	10/-	10% June '95	0 10 0	160,000	Rand.....	Basing House, E.C.
North Randfontn.	1⅝ 1⅞	1⅝ 1¾	—	—	—	—	—	—
" Sheba	6/ 6/6	6/- 6/6	1 0	—	1 0 0	200,000	—	38, London Wall.
Nourse Deep.....	5¼ 5¾	4 5	1 0	—	1 0 0	375,000	Rand.....	120, Bishopsgt.-st., Wn
Oceana	2 2⅛	1 13/16 1 15/16	1 0	25/- Nov. '89	1 0 0	357,430	Transvaal.	4, Sun Court, E.C.
" Developmnt	1⅝ 1⅞	⅞ 1⅛	1 0	—	1 0 0	50,000	"	"
Ophir Concess. ...	3/8 4/8	3/8 4/6	1 0	—	0 18 6	111,857	E. C. Africa	31, Lombard-street
Orange F.S.E. ...*D*	3½ 4	3½ 4	1 0	10% Aug., 95	1 0 0	284,000	Orange F.S.	10, Moorgate-street
Orion (New).....*G*	3⅜ 3¾	2⅞ 3	1 0	10% Aug. '95	1 0 0	30,000	Rand.....	Warnford-court. †
Otto's Kopje.....*D*	1/8 2/	1/8 2/-	1 0	—	1 0 0	437,868	Kimberley	8, Old Jewry.
Paarl Central ... *G*	1 5/16 1 7/16	1⅜ 1⅝	1 0	—	1 0 0	138,750	Transvaal.	120, Bishopsgt st, Wn
Pardy's Mozambq.	1⅞ 2	1½ 2	10/	3/- Jy 11 '95	0 10 0	13,000	S.E. Africa	8, Old Jewry.
" Range	10/6 11/6	10/ 11/	10/	—	£1 0 0	—	Manica.....	Broad Street Avenue
Piggs Peak ..... *G*	⅛ ⅝	⅛ ⅜	1 0	—	0 17 0	200,000	Swaziland.	6, Queen-street-place
" Peak .... *G*	7/16 9/16	7/16 9/16	1 0	—	1 0 0	60,652	"	"
Pleiades.....	⅛ ⅜	⅜ ⅜	1 0	—	1 0 0	140,000	Black Reef	"
Porges Randfontn.	2⅛ 2¾	1¾ 2	—	—	—	—	—	—
Potchefstroom... *G*	1 5/16 1 7/16	¾ ⅞	1 0	—	1 0 0	389,750	Potchefstm	19, Bury-st., E.C.
Princess Estate *G*	3 5/16 3 7/16	2⅞ 3⅛	1 0	—	1 0 0	125,000	Rand.....	33, Cornhill, E.C.
Rand Central Ore	2¼ 2½	2¼ 2⅜	1 0	25 p c Aug. 95	1 0 0	115,000	—	8, Princes-street, E.C.
Randfontein .....*G*	2 3/16 2 5/16	2 1/16 2 3/16	1 0	—	1 0 0	2,000,000	Rand.....	59, Holborn Viaduct
Rand Mines .....*G*	29¾ 30¼	29½ 30⅛	1 0	—	1 0 0	332,798	"	120, Bishopsgt. st. E.C.
Rand-Rhodesia Ex	1⅜ 1⅝	1⅜ 1⅝	1 0	10 p.c. Oct. '95	1 0 0	25,000	R&Rhodesa	123, "
Read's Drift .....*D*	2⅛ 2¾	3¼ 3⅝	1 0	—	1 0 0	37,000	Transvaal.	19, Finsbury circus.
Rhodesia Expln ..	9 10	8 9	1 0	—	1 0 0	50,000	Mt & Mash'l	8, Old Jewry.
" Gold Reefs	—	—	1 0	—	1 0 0	35,000	Rhodesia..	23, Leadenhall street
Robinson S A Bank	5⅛ 6⅛	5⅛ 6⅛	4 0	—	4 0 0	750,000	—	8, Princes' street
" Diamond	2 2¼	2¼ 2⅞	1 0	—	1 0 0	350,000	Kaal Valley	"
" Gold	9⅞ 10⅛	9¼ 9¾	1 0	6/- Jy 26 '95	5 0 0	550,000	M. Rf. 'rand	32, Austin Friars, E.C.
" Randftn.	⅞ 1⅛ xrts	15/16 1 1/16	5 0	—	1 0 0	517,000	Rand.....	8, Prince's-street.
Roodepoort Deep	3½ 3⅝	2¾ 3	1 0	—	1 0 0	170,000	"	8, Old Jewry, E.C.
Roodepoort Un. *G*	6⅜ 6⅝	6⅛ 6¾	1 0	5/ Aug 14 '95	1 0 0	430,000	Rand.....	Warnford-court. ‡
Rose Deep	5¼ 5¾	5 5¼	1 0	—	1 0 0	300,000	M. Rf. 'rand	30-31, S. Swith's-la.
Rosenblock Tw'Rfs	⅞ 1	⅞ 1	—	—	1 0 0	60,000	Krugersdp	4, Tokenhouse bldgs.
Rothery Block.....	⅞ ⅞	15/16 15/16	1 0	—	—	—	—	55, Bishopsgate st.
St. Angelo	4¾ 5	3⅞ 4	1 0	—	1 0 0	175,000	—	Winchester House
Salisbury Gold ...	3⅞ 4⅛	3⅞ 4⅛	1 0	—	1 0 0	93,000	Rand.....	96, Gresham Ho., E.C.
Sheba .....*G*	1 1/16 1 1/8	1 0/16 1 1/16	1 0	1/- Sep 28 '94	1 0 0	850,000	Lydenburg	15, S. Helen's place
Sijati .....*G*	9/6 10/6	5/16 7/16	1 0	—	0 18 6	119,000	Zoutpan'bg	4, Sun Court, E.C.
Simmer & Jack...*G*	7 7½	7¼ 8	1 0	2/ Aug 14 '95	1 0 0	250,000	Rand.....	8, Old Jewry.
S. A. Gold Trust ...	9⅛ 9⅜	9⅛ 9⅜	1 0	5/ Jun 12 '95	1 0 0	250,000	S. Africa ...	"
Southern Geldnus.	1/6 2/3	—	1 0	—	1 0 0	120,000	Elandsfont	6, Great St. Helen's
" Land.....	⅛ ⅜	—	1 0	—	0 15 0	80,000	Gigld. W. & B. Bech	19, St. Swithin's-la.
South West Rand	1 1/16 1 3/16	⅝ ⅞	1 0	—	1 0 0	158,000	Rand	Winchester House
Spitzkop (New) *G*	1 1/16 1 3/16	1 1/16 1 1/16	1 0	—	1 0 0	99,070	Lydenburg	15, Bishopsgt-st, E.C.
Stanhope ..... *G*	1 1⅛	⅞ 1 xd	1 0	2/- Oct 20 '95	1 0 0	34,000	Rand....	96, Gresham Ho., E.C.
Sutherland R. ...*G*	8/6 9/6	7/ 8/	1 0	—	1 0 0	220,000	Zoutpan'bg	Dashwood Ho.
Tati Concessions ...	2 1/16 2 3/16	2 1/16 2 3/16	1 0	—	1 0 0	392,200	—	Gresham House,
Thistle Reef ..... *G*	1/6 2/6	1/6 2/6	5/-	—	0 5 0	547,376	Barberton.	Copthall House
Trans. Coal Trust...	1 3/16 1 5/16	1⅞ 2	1 0	1/- Sept. '95	1 0 0	439,965	Rand.....	Broad-st. House, E.C.
" " Consolidatd	2⅛ 2¼	2⅛ 2⅜	—	—	—	—	—	—
" " Est. & Dev.	1 1/16 1 3/16	1 1⅛	1 0	—	1 0 0	285,700	Transvaal.	78, Old Broad-st. E.C.
" " Gen. Assoc.	3 3¼

"THE MINING JOURNAL" SHARE LIST—(Continued)

AUSTRALIAN AND NEW ZEALAND MINES.

Name.	Closing Price, Nov.15,1895.	Closing Price, Nov. 8, 1895.	Am't. of Share	When last XD and Dividend.	Called up per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Adelaide .....G	⅝ ⅞	⅝ ⅞	£1 0	—	£0 17 6	67,000	Murchison	17, Old Broad st.
Adelina Gld. Fld.	1⅞ 2/3	1/6 2/	2/6	—	0 2 6	642,456	N.Zealand	Poultry.
Adelina Lamp G	1⅞ 1⅞	1⅞ 1⅞	1 0	2/6 Sep 26 '95	1 0 0	100,000	N.S.Wales	4-6, Throg. Avenue.
Anglo French Exp	1⅜ 1⅝ pm	1⅞ 2⅛ pm xd	1 0	5/- Oct 30 '95	1 0 0	—	W. Austral	79, Queen Street.
Anglo-Ger.Explor.	1¾ 2 pm	1⅞ 2⅛ pmxd	1 0	5/- Oct 30 '95	1 0 0	99,000	,,	,,
Anvil BrownhillG	1 1⅛	⅞ 1⅛	1 0	—	1 0 0	60,000	,,	4, Gt. Winchester St.
Assoc. Gold Mines	1 1⅛	1 1⅛	1 0	—	1 0 0	375,000	Coolgardie	20, Bucklersbury
Austin.....G	1¹¹⁄₁₆ 1¹³⁄₁₆	1⅛ 1¼	1 0	-/6 Mar., '92	1 0 0	210,000	Queensland	6, Queen-st, place
Australasian .....G	⅝ 1	⅝ 1	1 0	-/9 Aug. '95	1 0 0	18,315	S. Austral.	15, Old Jewry Chbrs
Australasian C	— —	— —	1 0	1/- June, '91	1 0 0	522,708	N.S.Wales	Dashwood House.
Aus. Bro. Hill Con.	2/ 2/6	2/ 2/6	1 0					
Baker's Creek ...G	1¹¹⁄₁₆ 1¹³⁄₁₆	1⅝ 1¹³⁄₁₆	1 0	1/- May '95	0 17 6	100,000	N.S.Wales	Hillgrove, N.S.Wale.
Bendigo .....G	¾ 1	1 1¼	1 0	—	1 0 0	—	W. Austral	43, Threadneedle st.
Bayley's Reward G	5/8 6/8	5/ 6/	1 0	-/4 Dec. 94	1 0 0	480,000	Coolgardie	F'sb'y. H. Bl'm'fld St.
Big Bow .....G	⅝ ⅞	¾ ⅞	1 0	—	1 0 0	145,000	,,	Blomfield Ho., E.C.
Birdett's Claim G	⅝ ⅞	¾ ⅞	1 0	—	1 0 0	55,000	,,	16, St. Helen's Place
Black Flag.....G	1¼ 1⅜	1¼ 1⅜	1 0	—	1 0 0	140,000	,,	1, Metal Exch. Bldgs
Bogarees Freehld	2/8 3/	2/9 3/3	1 0	—	1 0 0	—	Aust. N.Z	Dashwood House.
Bonnie Dundee G	9/6 10/6	9/6 10/6	1 0	—	0 18 6	120,000	N Zealand	16, S. Helen's Place
Brilliant.....G	¾ ⅞	⅞ ¹⁵⁄₁₆	3 0	-/6 Oct 15 '95	2 0 0	250,000	Queensind	Charters Towers,
Block ...G	1⅞ 2 xd	⅞ 2	1 0	-/6 Nov 14 '95	1 0 0	70,000	,,	16, S. Helen's Place
,, St.Geo.G	1¹⁵⁄₁₆ 2¹⁄₁₆	1⅞ 2	10/	1/ Nov 12 '95	0 10 0	72,000	,,	Charters Towers,
Bra. Brok. Hill S	17/6 11/6	10/6 11/6	1 0	—	1 0 0	240,000	N.S.Wales	Dashwood Ho., E.C.
,, S	— —	— —	8/	—	0 8 0	—	,,	,,
Brown United .G	1½ 1¾	1¾ 1¾	5/	—	1 0 0	—	Coolgardie	57, Moorgate Street.
Bud Arrow .....G	3/8 4/3	3/9 4/2	5/	2/- Oct 16 '95	0 4 6	—	,,	,,
Bunker Hill Prop.S	2³⁄₁₆ 2⅝	2¼ 2¾	5/	—	0 8 0	960,000	N.S.Wales	Dashwood Ho., E.C.
Bushman Bros.	1¼ 1½	1¼ 1½	1 0	—	0 10 0	120,000	Han, W.A.	53, Coleman Street.
Cavenhill Prop.Ly.	— —	— —	1 0	—	0 10 0	—	Coolgardie	4, Gt. Winchester st
Caledonian .....G	3/6 4/6	3/6 4/6	1 0	—	—	120,000	W. Austral	Portland House.
Carrington.....G	4/ 5/	6/ 7/	12/6	—	0 12 6	100,007	Queensind	9, Tokenhouse Yard.
Chaman Bril.... G	⅛ ⅛	⅛ ⅛	1 0	—	1 0 0	55,128	Coolgardie	Winchester House.
Chantry Hill .....G	1¼ 1⅝	1⅜ 1⅝	1 0	—	1 0 0	115,000	W.Austral	4, Picardy Pl., Edin.
Central Bounser G	1¾ 1⅝	1¾ 1⅝	1 0	—	1 0 0	100,000	,,	20, Bucklersbury.
Exp. of W.A.	1⅝ 1⅞	1¼ 1⅝	1 0	—	1 0 0	122,000	,,	2, Met. Exchg. Bldgs
Chalfers	4/ 5/	5/ 6/	4/	—	—	300,000	,,	54, Old Broad-st.,E.C
Chasers Tow. ...G	1/ 1/6	1/ 1/6	10/	—	0 9 0	200,000	Queensind	110, Cannon Street
Chinese Consolid....	/8 1/	/6 1/	10/	—	0 8 6	300,000	,,	110, ,,
Colonial Finance...	3⅞ 4⅛ pm	3¼ 3¾ pm	1 0	rts Oct 19 '95	1 0 0	—	W. Austral	139, ,,
Colonial Gold Fields	1⅜ 1⅝ pm	1¼ 1⅝ pm	1 0	—	1 0 0	—	,,	,,
Con.G.M. of W.A.	⅜ ¾	½ ¾	1 0	—	1 0 0	90,000	,,	30, Moorgate Street.
,, Murchison	⅜ ¾	⅜ ¾	1 0	—	1 0 0	250,000	Murc., W A	Broad Street House.
Consuello ....G	par ¼ pm	par ¼ p.c	1 0	—	1 0 0	65,000	Cool., W A	Bishopsgate House.
Cont. & W.A. Trust	1⅛ 1¼	1⅛ 1¼	1 0	—	1 0 0	64,010	W. Austral	Broad Street House.
Coolgardie Gold ...	¾ 1	1¹⁵⁄₁₆ 1¹⁵⁄₁₆	10/	1/6 Oct 16 '95	0 5 0	100,000	Cool. W.A.	Broad Street Avenue.
,, Mining G	1/ 2/	1/ 2/	2/	—	0 0 8	40,000	Coolgardie	Winchester House.
Mint & I. Kg.	⅞ 1⅛	⅞ 1⅛	1 0	—	1 0 0	150,000	,,	30, S. Swithin's ln.
Crown's Cal. ... G	2/6 3/6	2/6 3/6	5/	-/3 June 94	0 4 8	100,000	Queensind	30-1, S. Swithin's-le,
Crown Bayley's,,G	1³⁄₁₆ 1⅛ pm	1³⁄₁₆ 1⅛ pm	1 0	—	0 10 0	80,000	Coolgardie	Bishopsgate Ho. E.C
,, United...	1³⁄₁₆ 1³⁄₁₆ pm	1³⁄₁₆ 1³⁄₁₆pm	1 0	—	1 0 0	75,000	—	110, Cannon-st., E.C.
Combined (New)G	1/9 2/3	1/3 1/9	1 0	2/6 Dec, '87	0 19 0	184,890	Queensind	Blomfield House.E C
Day Dawn E.&W.G	9/ 10/	9/ 10/	1 0	-/6 Mar. 93	1 0 0	498,400	,	16, S. Helen's Place
,, P. C. G	3/6 4/	3/9 4/	1 0	-/6 Apr, '92	1 0 0	490,000	,,	Winchester Ho., E C
Deighton's.....G	2/ 3/	2/- 3/-	1 0	—	0 18 0	120,000	Victoria ...	30-31, S. Swithin's ln
Emerald .....G	⅜ ¾	⅜ ¾	1 0	—	1 0 0	55,000	W.Austral	4, Fenchurch-st.
Empress .....G	⅜ ⅝	⅞ 1⅛	1 0	—	1 0 0	65,000	Murc., W A	Finsbury House, EC
Empress Coolge. G	⅜ ⅝	⅝ 1⅛	1 0	—	0 10 0	90,000	Coolgardie	2, Tokenhouse bldgs
Eng. & Aus. Cop. Co	⅛	⅛	2 0	2½ 1893	1 17 6	70,000	S. Austral.	136, Palmerston-bldg
Explorers Synd. ...	½ 1 pm	½ 1 pm	1 0	—	0 5 0	9,000	W.Austral	Copthall House
Flagall R'fs, Extd	¾ 1	⅞ 1⅛	1 0	—	1 0 0	150,000	,,	20, Gt. Winchester st
Florence.....G	1⅞ 2⅛	1¾ 2	1 0	—	1 0 0	60,000	,,	18, St. Swithin's ln
Fox of Oue	5/- 6/-	5/- 6/-	5/-	—	0 5 0	45,000	Murc. W A	8, Drapers Gardens
Gibraltar Cons.....	1¹⁵⁄₁₆ 1¹³⁄₁₆	1¹⁵⁄₁₆ 1¹³⁄₁₆	1 0	—	1 0 0	300,000	N S Wales	6, Queen-street-place
Gladiator .....G	¾ 1	¾ 1	1 0	—	1 0 0	—	W. Austral	43, Threadneedle st
Glenrock .....G	2/ 2/6	2/ 2/6	1 0	—	0 5 0	225,000	N. Zealand	3-5, Queen-st, E.C.
Golconda .....G	⅝ ⅝	⅝ ⅝	1 0	—	1 0 0	68,086	Murchison	Winchester House
Golden Crown...G	1⅛ 1⅜	⅞ 1⅛	1 0	—	1 0 0	100,000	W. Austral	54, Old Broad Street,
,, Gate.....G	1/ 2/	1/ 2/-	10/	—	0 10 0	150,000	Queensind	9, Tokenhouse Yard
,, Horse Shoe...	⅞ 1	⅞ 1	1 0	—	1 0 0	—	W. Austral	13, Helen's Place
,, Link .....G	1 1¼xd	1 1¼xd	1 0	5/- Oct 30' 95	1 0 0	90,000	,,	Dashwood House
,, Plum.....G	1⅛ 1¾	1⅛ 1¾	1 0	—	1 0 0	120,000	,,	4, Bishopsgate Street
Gold Estates.....	2⅝ 2⅞	2⅝ 2¾	1 0	3/ Sep 12 '95	0 10 0	80,000	,,	42, Gresham House.
Great Boulder ...G	5⅜ 5⅝	5⅜ 5⅝	1 0	2/- Oct 16 '95	1 0 0	240,000	Yilgarn ...	3, Gracechurch st.
,, Fingall Rfs.	1¼ 1⅜	1¼ 1⅜	1 0	—	1 0 0	175,000	Kurnalpi	Broad Street House.
Graham Synd. ..	1⅝ 1¾ pm	1⅝ 1¾ pmx	1 0	4/- Oct ,'95	1 0 0	50,000	W. Austral	13-14, Abchurch ln.
Hainault .....G	2 2¼	2 2¼	—	—	—	—	—	82, Gordon st., Glas.
Hampton Gold F'ds	par ⅛ pm	par ¼ pm	1 0	—	0 10 0	—	—	9, 8. Mildred's Ct.
,, Gold Hill	1/3 1/9	1/3 1/9	10/	—	0 8 6	—	—	15, Geo. St., Mns Ho
,, Lands...	6⅛ 7	6¼ 7	1 0	10/- Oct 16 '95	1 0 0	53,164	Coolgardie	1, Whittington Avue
,, Plains...	3⅞ 4⅛	3¾ 3¾	1 0	—	1 0 0	300,000	,,	29, S. Swithin's lane
Hannan's PlainsEx	14/ 15/	14/ 15/	1 0	—	0 18 0	180,000	,,	Suffolk House, E.C.
Hannan's BrwnHill	6⅜ 6⅞	6⅜ 6¾	1 0	—	1 0 0	65,000	Coo gardie	Broad Street House.
,, Main Reef...	⅝ ⅝	⅝ ⅝	10/	—	0 10 0	—	,,	18, St. Swithin's ln.
,, North.....	1¹⁵⁄₁₆ 1¹⁵⁄₁₆	1¹⁵⁄₁₆ 1¹⁵⁄₁₆	—	—	—	—	,,	,,
,, Oroya	1⅜ 1⅜	1⅜ 1⅜	1 0	—	1 0 0	—	,,	,,
,, Reward... G	3 3½	3 3½	1 0	—	1 0 0	70,000	Hann. WA	20, Bucklersbury
,, Star.....	1⅜ 1⅝	1⅜ 1⅝	1 0	—	1 0 0	—	E.Coolgde.	Bartholomew Ho,
Hauraki.....G	9/6 10/6	10/6 11/9	2/6	1/ Sep 12 '95	0 6	250,000	Coromndl.	Finsbury House E.C
Hawk's View	1 1¾	1 1¾	1 0	—	1 0	40,000	W. Austral	Dashwood Ho.; E.C
Idaho .....GS	6/ 6/6	6/ 6/6	10/	rts -/2 Dec 94	0 5 0	143,439	W. Austral	20, St. Swithin's ln.
Iduna .....G	1/ 1/6	1/6 2/	10/	—	0 9 9	249,250	Queensind	Copthall House.
Inkerman.....G	1⅜ 1⅞	1⅞ 2⅛	1 0	—	1 0 0	34,000	W. Austral	70-71, Bishopsgate st
Inkerrilla .....S	6/- 7/-	6/- 7/-	1 0	—	1 0 0	87,938	So. Austral	20, Threadneedle-st
Iquiqua.....G	9/ 10/	9/ 11/	1 0	rts May 24 '95	0 19 6	249,760	N.Zealand	68, Coleman-street,
Iliwella .....G	⅜ ¾	⅜ ¾	1 0	—	1 0 0	80,000	Murchison	9, New Broad-street.
Ilistere .....G	¾ 1 pm	¾ 1pm	1 0	—	1 0 0	50,000	W. Austral	33, Broad-st. Avenue
Ivanhoe.....G	¾ ⅝	⅝ ⅜	1 0	—	—	—	Coolgardie	13, Abchurch lane.
Lady Loch.....	1¾ 2	1¾ 1¾	1 0	—	1 0 0	70,000	,,	Throgmorton House
,, Mary Amalg.	1¾ 2	1¾ 2	1 0	—	1 0 0	46,000	Murchison	9, Tokenhouse Yard.
,, Stenton	1⅝ 1⅞	1¾ 1¾	1 0	—	1 0 0	—	—	Finsbury House.
Lake View & E. Bldr	2 2¼	2 2¼	—	—	—	—	—	18, St. Swithin's ln
Lindsay	¹³⁄₁₆ ¹⁵⁄₁₆	¹³⁄₁₆ ¹⁵⁄₁₆	1 0	—	1 0 0	65,000	Coolgardie	Copthall House
Lon. & Globe Fin.	2⅛ 2⅜	2⅛ 2⅜	1 0	—	0 15 0	—	W. Austral	15, Austin Friars.
Londonderry.... G	⁷⁄₁₆ ⁹⁄₁₆	⁷⁄₁₆ ⁹⁄₁₆	1 0	—	1 0 0	467,000	—	3, Gracechurch-st.
LAW. Aust. Expl.	5½ 5¾	5⅜ 5⅝	1 0	4/-Nov 29 '94	1 0 0	100,000	W. Austral	Broad Street Ho.
Lon. W. A. Invest.	2⅛ 2¼	1⅞ 2⅛	1 0	4/ Oct 16 '95	1 0 0	100,000	,,	,,
Mainland Cons. G	1⅞ 2⅛	1⅞ 2⅛	1 0	—	1 0 0	150,000	Murchison	84 Old Broad Street
Mallina Gold	¹³⁄₁₆ ¹⁵⁄₁₆	¹³⁄₁₆ ¹⁵⁄₁₆	1 0	—	1 0 0	89,000	W. Austral	49, W. Geo. St., Glas
Mawson'sReward. G	¹³⁄₁₆ ¹⁵⁄₁₆	¹³⁄₁₆ ¹⁵⁄₁₆	1 0	—	1 0 0	60,000	,,	28 & 29, S. Swithin's ln
Menzies Gold Est.	1⅛ 1⅜	⅞ 1⅛	1 0	—	—	—	,,	Broad Street House
,, Gold Reef	1¾ 2	1⅝ 1¾	1 0	—	1 0 0	175,000	,,	22a, Old Broad Stree
,, (O'Driscoll)	1⅛ 1¾	1¾ 2	1 0	—	1 0 0	—	,,	16, Tokenhouse Yard
Mid Day Dawn G	¹³⁄₁₆ ¹⁵⁄₁₆	⅞ 1	1 0	-/6 Aug 29 '95	0 15 6	300,000	Queensind	16, S. Helen's Place
Miner's Dream ...	par ⅛ pm	par ⅛ pm	1 0	—	1 0 0	100,493	Cool., W A	Bishopsgate House
Mosman.....G	3/6 4/	3/6 4/	1 0	—	0 19 0	135,000	N.S Wales	,,
Mount Margaret...	1⅜ 1⅜	⅞ 1⅛	1 0	—	1 0 0	—	W. Austral	28, St. Swithin's ln.
,, Morgan G	2¹⁵⁄₁₆ 3¹⁄₁₆ xd	2¾ 3	1 0	-/6 Nov 14 '95	0 17 6	1,600,000	Queensind	9, Gracechurch-st.
Murchison Gift ...	¾ ⅞	¾ ⅞	10/	—	0 10 0	120,000	Murc. W.A.	11, Q. Victoria-st, E.C
,, Gold ...	7/6 8/6	7/6 8/6	5/	—	0 5 0	400,000	,,	Winchester House.
,, N. Oh'm	1 1⅛	1 1¼ xd	1 0	1/- Oct 30 '95	1 0 0	160,000	,,	23, College Hill.
N. Australian G. F.	1⅜ 1⅝	1⅜ 1⅝	1 0	-/6 June, '95	0 19 6	20,000	—	7, Union Court,
New Queen .....G	8/3 8/9	8/ 8/6	1 0	-/6 Sep 12 '95	0 19 6	158,915	Queensind	30, St. Swithin's-la.
North Boulder.....	8/- 9/-	8/- 9/-	10/-	—	0 10 0	—	W. Austral	18, Helen's Place
,, Coolgardie ..	1/3 1/9	1/6 2/	5/	—	0 4 0	400,000	Pilbarra ...	226, Winchester Ho.
,, Fingall Reefs	1 1⅛	1 1⅛	1 0	—	1 0 0	—	Cool., W A	18, S. Swithin's lane
,, Kalgurli	1⅛ 1⅜	⅛ ¾ pm	1 0	—	1 0 0	—	,,	11, Abchurch lane
,, Qld. n Agency	1⅞ 2⅛	1⅞ 2⅛	1 0	30 X Aug. '95	1 0 0	90,000	Queensind	10 New Broad Street
Omnium G M Assoc	1¼ 1⅜	1¼ 1⅜	—	—	—	80,000	—	Broad Street House
Pilbarra G. F.	1 1¼	1⅛ 1⅜	1 0	—	1 0 0	100,000	Pilb, W. A.	38, Coleman-street.
Queen's Bthdy Un.	11/ 12/	11/- 12/	—	—	0 12 6	75,000	Victoria ...	7-8, Gt. Winchester St
Ramage Syndicate	7 9 pm	7 9 pm	1 0	—	1 0 0	50,000	W. Austral	4, Bishopsgate-st,
Royal Oak	3/ 3/6	3/- 3/6	5/	—	0 3 0	200,000	N. Zealand	Dashwood House.
,, Sovereign ...	1¼ 1⅜	1⅛ 1¾	1 0	—	1 0 0	60,000	Coolgardie	8, Old Jewry, E.C.
Sam's With.of Nat.	4/ 5/	4/- 5/	1 0	—	0 18 0	200,000	W. Austral	33, Old Broad Street.
Scottish Australian	⅜ ⅝	⅜ ⅝	1 0	-/3 Aug., '95	1 0 0	200,00	N. S. Wales	Winchester Ho. E.C.
Scully's Hauraki...	2/3 3/	2/6 3/	5/	—	0 2 0	400,000	N. Zealand	5, Drapers gardens
So. Londonderry....	2/ 3/	4/ 5/	1 0	—	0 19 0	200,300	Cool. W. A.	20, Bucklersbury.
Spensley Finance	½ ¾ pm	½ ¾ pm	—	—	—	—	W. Austral	,,
Stray Shot & Excel	¾ 1	¾ 1	1 0	—	1 0 0	—	Pilb., W A	20, S. Swithin's lane.
Tavara.....	3/6 4/8	3/6 4/6	10/	—	0 3 0	90,000	N. Zealand	Dashwood House.
Town Prop. of W A	⅛ ¾ pm	⅜ ⅝ pm	1 0	—	0 10 0	250,000	W. Austral	28-9, S. Swithin's-l
True Blue	2¹⁄₁₆ 2³⁄₁₆	2⅛ 2⅜	1 0	—	1 0 0	—	—	Dashwood House.
Victoria Associate	— —	— —	1 0	—	1 0 0	144,000	Chr. Tow.	6, Crosby-square
Victory..... G	7/ 8/	7/ 8/	5/	-/3 Oct, '95	0 5 0	40,000	Queensind	32, Gresham-st., E.
Welsh..... G	6 6¼	5⅞ 6¼	5/	-/3 May, '94	1 0 0	187,000	N. Zealand	11, Abchurch-ln. E.C
Waitekauri	4 4⅛	3⅞ 4⅛	1 0	2/- Sep 12 '95	1 0 0	126,000	,,	,,
,, Extende ...	⅜ ½	⅜ ½	10/	—	0 10 0	130,000	,,	63, New Broad St.
Wanlock..... G	8/6 9/6	8/6 9/6	10/	—	0 10 0	100,000	Crydn, N Z	43, Threadneedle st
Water Trust Min.	1¼ 1⅝	1¼ 1⅝	1 0	—	1 0 0	120,000	W. Austral	Broad Street House
W. of Nations.....	⅜ ½pm	⅜ ½ pm	1 0	—	—	—	—	54, Old Broad st., E.C
Wentworth Exten.	— —	— —	5/	—	0 5 0	180,428	N. S Wales	19, S. Swithin's Lane
,, ... G	1 1¼	1 1¼	1 0	1/- Aug 14 '95	1 0 0	500,000	—	4-6, Throgmort. Av.
W. Argentine ...G	1/ 1/8	1/ 1/8	1 0	—	1 0 0	150,000	N. Zealand	3-5, Queen-street.
W. Aust. G. Concess	2½ 2¾	2½ 2¾	1 0	2/- Sep 27 '95	1 0 0	285,000	W. Austral	33, Old Broad st., EC
W. A. Ex. & Fin.	3¼ 3½	3½ 3¾	1 0	2/- May 10 '95	1 0 0	200,000	,,	54, ,,

AUSTRALIAN AND NEW ZEALAND MINES—(Continued).

Name.	Closing Price, Nov.15,1895	Closing Price, Nov. 8, 1895.	Am't. of Share	When last XD and Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
W.A. General	5¼ 5¾ pm.	6 6½ p m	1 0	—	1 0 0	—	W. Austral	28, St. Swithin's-ln,
W.Australian G.F.	6¾ 6⅞	6 6¼	1 0	5/- Aug 14 '95	1 0 0	65,000	Coolgardie	28-29, ,,
W. Aust. Mining	9/ 10/	9/ 10/	1 0	/5 Oct 16 '95	1 0 0	104,141	W. Austral	257, Winchester Ho,
W. Aust. Pioneer.	1¾ 2pm	1¾ 2 pm	1 0	rts Oct 19 95	0 15 0	19,993	,,	139, Cannon-street,
,, Share Corp.	⅛ ¾pm	⅛ ¾ pm	1 0	—	0 5 0	200,000	,,	28, St. Swithin's ln
,, Trust	¾ ⅞ pm	¾ ⅞ pm	1 0	—	1 0 0	50,000	,,	54, Old Broad Street.
West Boulder	1 1¼	1 1¼	—	—	—	—	,,	,,
Westralia	1⅛ 1⅜	1⅛ 1⅜	1 0	—	1 0 0	—	—	Winchester House.
White Feather ...	2½ 2⅝	1⅞ 2⅛	1 0	—	1 0 0	60,000	Coolgardie	28 & 29, S. Swithin's ln
,, United	⅞ 1	⅞ 1	1 0	—	1 0 0	75,000	,,	139, Cannon-street
Zapopan .....G	5/3 5/9	5/3 5/9	1 0	—	1 0 0	25,000	N W Austra	70, Bishopsgate-street
Zeehan Montana S	— —	— —	1 0	-/4 May 95	1 0 0	66,000	Tasmania	11, Queen Victoria st
,, ...	— —	— —	1 0	2½ May 95	0 2 6	12,000	,,	,,

NORTH AMERICAN MINES.

Alaska Mexican...G	1¼ 1¾	1½ 1¾	$5	7 1-5d. July, 95	$5	160,000	Alaska.....	30, St. Swithin's-ln
Treadwell G	5¼ 5¾	5½ 6xd	$25	1/6 July, '95	$25	200,000	,,	,,
Almada and T....S	-/9 1/	/9 1/3	2/6	—	0 2 0	351,008	Mexico ...	6, Queen-street-place
American Belle...S	1/3 1/9	1/3 1/9	1 0	-/6 Mar. '91	1 0 0	398,890	Colorado	25A, Old Broad-street
Anglo Mexican ...S	— —	— —	5 0	2/- Sep. 95	5 0 0	74,850	Mexico ...	23, College Hill.
Arizona (Pref.) Cu	51/6 54/-	49/ 49/3	4 0	1/- July '95	4 0 0	158,920	Arizona ...	74, Geo.-st, Edinbor
,, 6½ A Deben.	105¾	105¾	100 0	6½ X May '95	100 0 0	£135,300	,,	,,
,, 7 X B Deben.	93¾	94½	100 0	7 X May '95	100 0 0	£181,300	,,	,,
De Lamar.....GS	19/6 20/6	19/6 20/6xd	1 0	1/- Oct. 30 '95	1 0 0	400,000	Idaho	6, Drapers-gardens.
Dickens Custer GS	1/6 2/	1/6 2/	1 0	—	0 19 9	420,000	,,	Winchester Ho. E.C
Doric..... .....G	2/3 2/9	2/ 2/6	5/	—	0 5 0	125,000	Colorado...	
Elkhorn .....S	2/9 3/3	4/9 5/3	1 0	-/3 June 26 '95	1 0 0	175,007	Montana	6, Draper's-gardens.
Emma .....S	-/6 1/-	/6 1/-	5/	—	0 5 0	403,618	Utah	15, Geo-st, Mansn. Ho
Gen. M'g. Assoc. ...	6½ 7	6¼ 7	5 10	14/- Apr. 95	5 10 0	27,469	C. Breton	Blomfield House
Golden Feather G	4/ 6/	3½ ¾	1 0	—	1 0 0	180,000	California	8, Stephens Co E.C.
,, Gate .....G	3/6 4/6	3/6 4/6	1 0	—	0 19 6	79,600	,,	,,
,, Leaf.....G	2/ 2/6	1/9 2/3	1 0	—	1 0 0	300,259	Montana	6, Draper's Gardens.
Harquahala... .. G	6/3 6/9	6/ 6/6	1 0	-/6 Oct., '94	1 0 0	300,000	Arizona ..	6, Draper's Gardens.
Holcomb Valley G	1/- 1/8	1/ 1/6	5/	—	0 5 0	540,000	California	14, Cornhill, E.C.
Jackson Goldfields	1/6 2/	1/3 1/9	5 0	—	0 5 0	408,635	California	11, Poultry, E.C.
Jay Hawk (New)G	1/- 1/6	1/- 1/6	1 0	-/6 Dec. '92	0 19 3	285,000	Montana	Dashwood House.
La Plata.....S	1/9 2/3	1/3 1/9	5/	1/3 Oct. '82	0 4 6	405,000	Colorado	11, Poultry, E.C.
La Yesca .....GS	2/6 3/-	3/ 3/6	1 0	—	0 19 6	200,000	Mexico ...	20, Bucklersbury, EC
Mammoth Gold ...	1/- 1/6	1/ 1/6	1 0	—	1 0 0	400,000	Pual, Ariz.	257, Winchester Ho.
Mesq. d'l Oro (P) G	— —	— —	5 0	—	0 10 0	10,000	Mexico ...	Dashwood Ho., E.C.
,, (D) G	— —	— —	5 0	—	0 10 0	10,000	,,	,,
Montana ..... GS	7/- 7/6	7/ 7/6	1 0	-/3 Sep. 27, '95	0 19 0	657,158	Montana	Gresham House, E.C.
New Colorado ...S	— —	— —	1 0	—	0 19 6	34,503	Colorado	S. Geo. Ho., E'cheap
,, Gold Hill...G	— —	— —	1 0	—	0 19 9	191,045	N Carolina	15, George-st., E.C.
,, Guston .....S	¼ ⅜	¼ ⅜	1 0	1/- Oct. '92	1 0 0	110,000	Colorado	25A, Old Broad-st.
,, Hoover Hill G	-/6 1/-	-/6 1/-	10/	-/9 Dec. '85	0 10 0	120,000	N Carolina	Langthorne Ho., E.C.
Palmarejo .....GS	1/6 2/-	1/6 2/	1 0	—	1 0 0	418,888	Mexico ...	32, Old Jewry, E.C.
Parral Cons. ...GS	¾ ⅞	¾ ⅞	1 0	—	1 0 0	121,007	,,	Palmerston Bldgs., EC
Pinos Altos (Df) GS	⅜ ⅜	⅜ ⅜	1 0	-/6 Mar.' 90	1 0 0	100,000	,,	110, Cannon-street.
,, 15 X Cum Pref	⅞ 1	⅞ 1	1 0	—	1 0 0	60,000	,,	,,
Richmond ...GSL	⅞ 1⅛	⅞ 1⅛	5 0	1/- Nov. '94	5 0 0	54,000	Nevada ...	44, Coleman-street,
Sierra Butter ...G	⅛ ⅝	⅛ ⅜xd	2 0	-/6 Oct. 30 '95	2 0 0	122,500	California	138, Leadenhall-st.
Do. Plumas Eur. G	⅛ ⅝	⅛ ⅜xd	2 0	-/9 Oct. 30 '95	2 0 0	140,265	,,	,,
Springdale.....G	1/3 1/9	1/3 1/9	$1	-/2 Sep. 28, 94	$1	1,000,000	Colorado	20, Abchurch Lane.
Twin Lake Placers	1¼ 1⅜	1¼ 1⅜	0	3/- Feb. '95	1 0 0	26,000	,,	5, Lawrence P. Hl. E.C

SOUTH AND CENTRAL AMERICAN MINES.

Anglo-Chilian Pf N	8

SOUTHERN MINERAL BELT OF BRITISH COLUMBIA.

Being a series of letters from the special correspondent of the "Miner," written in July, 1895.

Rossland.

IN September of 1894 a few people interested in mining had heard of Rossland, and under the name of Trail Creek, the camp in which the town is situated, had for some time attracted the attention of wide-awake men in West Kootenay; but in September, when a friend of ours arrived there were only four houses in the place. To-day Rossland has an estimated population of from 1200 to 1500 inhabitants; it is not easy to rent hotel space for your blankets, the hotels send away they say nearly 100 would-be customers a day, and enough new hotels and boarding houses are going up to make it worth the while of a first-class furnishing firm to go in, take up their contracts and establish a place of business in the town. Such a firm is now making arrangements for a house to be put up within a fortnight This all results from the development of the mineral belt in which Rossland is situated and not (men claim) from town site booming. The fact that about 50 four-horse teams are at work daily upon the road between Rossland and Trail, and that the Recorder records from 18 to 20 claims per diem, show that the activity at Rossland is very genuine.

Since September, 1894, 240,000 acres have been taken up, and the War Eagle Mine alone has put out 4210 tons of ore, and paid $84,000 in dividends to her lucky purchasers. This is a very pretty return, so far, from a mine which is said to have cost about $23,000, and upon which up to date less than another $60,000 has been expended, especially when it is remembered that the owners of the War Eagle are not "gutting" their property, but are doing a lot of deadwork all the time, in order to keep a reserve of gold ore always in sight. It is said upon good authority that the mine has 1½ millions of ore in sight at the present moment, and the last report current when we left Rossland was that a new strike has been made in the west shaft of the War Eagle, consisting of a foot of arsenical vein, nearly as white and as heavy as iron carrying $1400 in gold to the ton, and running through a 19-foot vein of ordinary War Eagle ore. The report was very general and may be true, but it is fair to say that we could not get any authority for publishing it as a fact, and, therefore, only give it for what it is worth. Another report circulating through the camp, which we have every reason to believe was well founded, was to the effect that Mr. Drumheller had struck 12 feet of rich ore upon his claim, the Alberta on Columbia Mountain, for which he is said to have paid $1000 a short time ago. No wonder whilst such things are happening—whilst the mountains all round echo with blasting—while Billy Lynch, the lucky prospector, smiles his $50,000 smile on his less fortunate associates, while men see the great wagons loading up all day with ore, no wonder, I say, if the camp is jubilant. You have to get outside of Rossland before you can hope to form any fair estimate of what it all means, and of how great is the measure of her success.

The cold facts appear to be that Rossland is the centre of the first serious attempt to develop a portion of a great mineral belt now well known and recognised as extending for 100 miles at least through the southern portion of British Columbia. That British Columbia "has not begun to be properly prospected" is the verdict of the men who have done most prospecting here, and there can be no doubt that even less capital so far has been expended in development than energy in prospecting. Slocan has been lucky in securing a large portion of the capital so far spent. Rossland is having the next turn, and, like her predecessor, she is proving daily how she can repay all the energy and money which has been spent upon her, but neither she nor the Slocan has a tithe of the capital required to do justice to their mineral deposits, or to enable men to reap the harvests which they offer. It is still the day of small things in both camps, and there is still an enormous amount to be done in each of them. The big men are really hardly in yet. Too many of the buyers are still middle men; gentlemen come in who with a blast of trumpets bond properties in the hope of selling them again to real capitalists who can work them. If they sell and sell to men who mean mining it is all right. Too often they only tie up properties and retard the growth of the country.

It is not, then, to be wondered at that at present there are only four mines really shipping from Rossland: the War Eagle, the Le Roi, the Josie, and the North Star. The wonder in any other country would be that, placed as they are, there should be so many mines, so far prospected and doing so much shipping as they are now doing, for it must be remembered that though the Homestake was found in May, 1890, the Lillie May on the 27th of the same month, the War Eagle, Le Roi, and Josie in July, 1890, the camp was left dormant until the fall of last year. Speaking broadly, the Rossland or Trail Creek camp is a camp of smelting ores, the gangue, the capping, which varies in thickness from inches to 12 and 14 feet, is an iron capping, and the mineral pyritic iron carrying from $30 in gold and a percentage of copper. There are two or three free milling properties within the limits of the camp; one of which, the O.K., has a five-stamp mill at work upon it, and there are properties, like the Commander, 2½ miles east of Rossland, which carry a large percentage of copper, but these are not typical of the camp.

To speak more particularly of the camp, it may be divided into the Red Mountain division, north-west of the town, in which are the principal mines at present—War Eagle, Le Roi, Josie and Cliff (all shipping mines); the Nickel Plate, which has shipped, but is I fancy now shut down, the owners having trouble with their water, and being at the moment engaged in a transfer of their property; the Gertrude, Surprise, Centre Star, Iron Mask, and a number of other claims which are being converted from mere prospects into more or less developed properties.

North of the camp is Monte Christo Mountain, upon which the principal properties are the Monte Christo claim, in which over 16 feet of solid ore has already been uncovered without finding footwall; the Enterprise and the Iron Horse (also showing big bodies of ore), and the Georgia. My informants agree that the ore on this mountain was similar to that upon Red Mountain, but of somewhat lower grade, but like all the ore in this camp, improved in quality as it went down.

Columbia Mountain is north-east of the town. Upon it are located the Columbia, from which it takes its name; the Kootenay, with a 40 feet ledge of iron pyrites, carrying, they claim, from 2 to 3½ ounces in gold and 3½ per cent. copper to the ton; the Tip Top; the North Star, which has just begun to ship; Belle and the Alberta, which has already been mentioned above. In the hollow at the foot of the Columbia Mountain Mr. W. Lynch recently located the Commander, the ledge of which he found showing a few inches above water in a swamp. Having drained the swamp he uncovered a property showing a high percentage of copper, which he has bonded for $50,000. Lynch is probably one of the luckiest (or best?) prospectors in the country, having already located several valuable mines, amongst others the Washington in the Slocan country.

Deerpark Mountain lies to the south-west, and is remarkable for carrying some galena, but, as yet, though good rock has been brought from it, very little development has been done upon it.

West of the town lies Spokane Mountain, round the base of which lie the free milling properties, the O.K. and IXL. Very little has been done on the mountain itself.

So much for the mountains. As to the men who are developing them, it must be admitted that they are nearly all Americans. Possibly the leading spirit in camp at present is Mr. John M. Burke, who once ran for the governorship of Idaho, and who is now said to own the Great Western, the Golden Chariot, the Ottawa, Key West, Le Roi, &c. The War Eagle is the property of a Spokane company, the Le Roi is also owned by a Spokane company, and I was informed that men from Butte were buying, or had bought, other important claims. Is it not time that some British capital should be invested in what seems likely to turn out one of the best-paying districts in British Columbia?

Camp McKinney.

McKinney is at the top of a mountain 28 miles from Fairview, and is an old camp revived, in which at present everything seems to depend upon the success of the one great mine, the Cariboo, now being operated and likely to be sold by its present owners, the Cariboo Milling, Mining, and Smelting Company, to a Butte company represented by Colonel Doyle. That is, I think, a fairly accurate if rough summary of the position at McKinney. That there is a very large quantity of valuable mining property in the immediate vicinity of the Cariboo there is no doubt, and this will probably be bought and developed as soon as one big company gets in and shows the way. But at present the only mine doing anything is the Cariboo, a free milling proposition, upon which a 10 stamp mill has been at work for about a year, and in which Colonel Doyle is now employing about 35 men in sinking. The Cariboo is bonded to the people whom Colonel Doyle represents, and will be bought if the ore maintains its character to the depth of 200 feet. The shaft is down 146 feet, and the colonel himself said that it seemed to improve as it went down. The mill is going night and day, the men working in eight hour shifts, and the ore which they mill returns $18 to the ton in gold. A good deal of work has been done outside of the Cariboo. In the Alice and Emma there is a shaft 67 feet deep, and many other claims have holes in them over 20 feet deep. The Anarchist Mountain, near Camp McKinney, is a district full of promises, any work upon it resulting in excellent showings, but at present, with the exception of the Butte Company, represented by Colonel Doyle, and a representative of the Standard Oil Company, there are as far as we could learn, no buyers in camp yet. The character of the ore (free milling) and the practical results of the development of the Cariboo Mine should do much to attract capitalists to the district, and no doubt will do so as soon as the results of Colonel Doyle's experiment are published. It is creditably reported that Mr. Monaha. and his colleagues have made in one year out of the Cariboo its working expenses, original cost, the price of their 10 stamp mill and its freight to McKinney (no slight sum that last), and a very comfortable cheque for pocket-money besides, and that the mine is now bonded for $175,000, but this is only hearsay evidence. What we know of our own knowledge is that this one mine is very busy, and that, as usual in British Columbia, there are practically no English or Canadians in it. The Americans are not only conquering Kootenay but acquiring British Columbia. It is rather funny to see the facts on the mountain and hear the fancies on the coast.

(To be Continued.)

WEALTH OF NATIONS.—The following is an extract from a report received from the mine manager by the secretary of the East Wealth of Nations Gold Company:—Lease No. 1041 driven south on the reef, 100 feet level, 2 feet, total from shaft 66 feet. Reef 8 feet wide, very solid and hard, but a splendid sample of quartz, and heavily charged with iron, visible gold shows at intervals. The adit has been driven 15 feet for the week, total 49 feet, it is now in sandstone quartz and ironstone mixed, and the panning off dish shows good colours of gold.

MEETING OF WELSH COLLIERY OWNERS.—At a meeting of the Monmouthshire and South Wales Coalowners, recently held at Cardiff, Mr. Wm. Evans, Cyfarthfa, presiding, among other matters the association considered the subject of a letter received from the secretary to the Amalgamated Society of Colliery Workers of the South Wales coal field, proposing a joint conference of colliery owners and workmen's representatives to discuss the question of over-production and under-selling, and Mr. Dalziel, the secretary, was instructed to reply to the effect that the association saw no reason for meeting any person on behalf of the respective workmen except the accredited representatives of the workmen on the sliding-scale committee

THE GEOLOGICAL SURVEY IN MYSORE. — Dr. Evans, superintendent Geological Survey, Mysore, who has also been acting in the capacity of Mines Inspector, will shortly be engaged in England o ganising a staff and purchasing machinery for experiments in gold mining about to be undertaken by the Mysore Government at Beanor and on the Cauvery river.

In regard to the Western Australian property, the following is an extract from Mr. J. Harvey's fortnightly report:—"During the past fortnight I cabled you that the assay of lode material from a bulk sample taken 9 feet from end of drive was 19 dwts. per ton; and also that the lode material assayed 7 ounces and 8 ounces 9 dwts. The last assay was from veins of quartz and iron, struck in the east drive from Grenfell's shaft; the shafts are 260 feet apart, and should this formation be the wall of the lode it will prove it to be over 100 feet of gold-bearing, highly payable formation."

DISCOVERY OF COAL IN NEWFOUNDLAND.—A large coal area, 12 miles long by 6 miles broad, has been discovered on the new line of railway to the west coast, and 40 miles by rail from the Bay of Islands. The geological surveyor estimates that one seam alone, which is 4 feet wide, contains 11,000,000 tons of excellent cannel coal. Six other seams have not yet been traced. The discovery has caused great rejoicing, as it immensely enhances the value of the railway and brightens the prospects of the colony.

THE Imperial Russian Government has appointed Mr. R. Gaudin Vice-Consul at Leeds.

PROSPECTS FOR BURMA COAL.—Encouraged with the good results obtained at the recent experiments made on the Burma State Railway with their fuel, the Burma Coal Exploring Co. have sunk four more shafts on the land recently acquired by them, and are equipping the pits with machinery capable of dealing with a large output. —*Indian Engineering.*

THE METROPOLITAN GOLD MINING COMPANY, LIMITED, (in liquidation) has removed from Warnford-court to 15 and 16, George-street, St. Swithin's-lane, E.C.

Mr. James M. Craze, mining engineer, has been appointed manager to the HAMPTON GOLD FIELDS (LIMITED) in West Australia, and also to BLOCK 42, HAMPTON PLAINS (LIMITED) in West Australia.

A London office for the GLEN DEEP (LIMITED), GLYNN'S LYDENBURG (LIMITED), and LANGLAAGTE DEEP (LIMITED) companies has been opened at 120, Bishopsgate-street, Within, London, E.C.

The certificates for the new ordinary shares in the NORTH QUEENSLAND MINES AGENCY (LIMITED) are now ready to be exchanged for the bankers' receipts and allotment letters.

BRITISH GUIANA'S GOLD INDUSTRY.

THE gold entered on the 17th ultimo at the Custom House, Georgetown, for shipment per the R.M.S. *Solent*, which sailed that afternoon, amounted to 6112 ounces 5 dwts. 22 grains, to the value of $108,673·43, as compared with the previous shipment of 5025 ounces 11 dwts. 21 grains, to the value of $89,621·55. With this addition the total output for the year amounts to 95,101 ounces 15 dwts. 6 grains, to the value of $1,686,649·65. The following are the shippers and the amounts of their shipments:—

	Ozs.	dwts.	grs.	Total value.
The Colonial Bank... ...	1828	10	17	
The B.G. Bank	4283	15	5	
Total...	6112	5	22	$108,673·43

The following are the returns of gold entered at the office of the Department of Mines for the weeks ending:—

	October 12. Ozs. dwts. grs.			October 19. Ozs. dwts. grs.		
Barama	—			...	190	19 16
Barima	539	1	15	...	824	13 13
Cuyuni	612	3	5	...	294	1 4
Demerara	—			...	5	1 6
Essequebo.....	439	19	20	...	782	1 17
Groeta Creek	13	7	2	...	23	5 9
Potaro	1024	16	1	...	335	6 0
Puruni	265	14	12	...	79	15 21
Total	2895	2	7	...	2535	4 14

Export of gold from January 1 to October 28:—

	Ozs.	dwts.	grs.		
1895	95,101	16	6	at	$1,686,649·65
1894	98,223	12	18	at	$1,751,650·08

AMERICAN MINING RETURNS FOR OCTOBER.

The following are the returns for October from mines whose shares are dealt in on the London market, and the outputs for the four preceding months are also given:—

Mine.	June.	July.	Aug.	Sept.	Oct.
Alaska Mexican.	$17,503	$17,879	—	$19,214	—
Alaska Treadwell	$87,697	$93,144	$83,587	$80,280	$77,749
Caratal	—	—	299	—	—
Cayllorna	—	—	10,750oz	22,250*	—
Cent. Chili Cop.	—	—	—	298 tons	—
Chiapas.....	—	—	—	155	158
Colombian Hy ...	£2,050	—	—	—	—
De Lamar	$78,715	$79,555	$81,231	$76,863	—
Don Pedro.....	126 oz	—	—	—	—
El Cal. (and Col.)	2,825 oz	2,925 oz	—	167 oz	—
Elkhorn	$26,805	$29,026	$28,032	$26,224	$29,720
Gravel	—	—	—	—	$3,902
Harquahala	$10,000	$16,650	—	—	£13,550
Macate	—	£160	—	—	—
Mesquital del Oro	725 oz	3,102 oz	1,391 oz	995 oz	1,313 oz
Montana.....	$64,200	$68,400	$64,300	$57,900	$61,000
New Guston	$26,370	$26,500	—	—	—
Orita	—	—	—	—	—
Ouro Preto.....	1,536 oz	1,455 oz	1,400 oz	1,536oz	—
Pinos Altos.....	$55,000	$55,750	—	£17,640	—
Plumas Eureka...	£1,956	£1,986	—	—	—
St. John del Rey.	3,516 oz	3,573 oz	3,400 oz	2,882 oz	2,040 oz
Sierra Buttes.....	£1,470	£1,539	—	—	—
Silver King	—	—	21,000 oz	22,000 oz	—
Tw. Lake Placers	—	—	$7,150	—	$3,500

* In ores and bullion.

Many of the companies do not publish the working profits, but the figures which are available are:—

Mine.	June.	July.	Aug.	Sept.	Oct.
Alaska Mexican...	$7,003	$7,301	—	—	—
Alaska Treadwell.	$65,663	—	—	$57,667	—
Cent. Chili Cop.	—	440	690	—	—
Colombian Hy....	£1,250	—	£8,074	—	—
De Lamar.....	£8,074	£8,089	£8,074	£7,709	—
Elkhorn	£1,001	£1,349	£1,360	£1,394	£1,360
Frontino	£481	—	£880	—	£1,500
Harquahala	—	£2,112	—	—	—
Montana	$14,000	$15,200	$14,800	$14,900	$15,100
New Guston	$10,220	$10,550	—	—	—
Orita	—	—	—	—	—
Pinos Altos	$13,465	$11,700	—	—	—
Plumas Eureka...	£402	£378	—	—	—
Sierra Buttes.....	£279	£354	—	—	—
Tolima	£2,000	—	£800	—	£1,000
Western Andes...	£220	£400	—	—	—

REPORTS FROM THE MINES.

BRITISH MINE.

POLBERRO.—November 11: Since we commenced work with the rock-drills we have cut the trip-plat, and have driven the 50 crosscut 4 fathoms north. The last 20 tons of stuff from the end will average 24 lbs. tin to the ton. There is a little water in the present end, which must be nearing Chappel's downright lode. This lode is underlying a little to the north. We expect to cut it in a few days' driving. The 26 west on Chappell's downright has been disordered somewhat by a gossan, but we have got beyond the influence of this, and the end is again improved, and yields a little tin. There is no change in the 26 crosscut north.—(Signed) Charles Thomas, John Harper.

SOUTH CONDURROW.—William Rich, November 13: The lode in the 40 end east is opening out wider, and is improving; it is now worth £10 per fathom. The stope in the back of the 40 west of the rise is worth £9 per fathom. Two other stopes in the back of this level are worth £8 per fathom each. There is nothing new to report on in the back of the 50 end. The stope in the back of the 60 east is worth £9 per fathom.

COLONIAL, INDIAN, AND FOREIGN MINES.

ALAMILLOS.—Mine report, dated November 6:—In the 40 fathom level driving west of Santa Agneda's shaft we hope to intersect the lode in the course of the month. We have intersected in the 70 fathom crosscut north of San Felipe's shaft a small lode which contains some stones of ore. The lode in the 85 west of Taylor's engine shaft is small and of no actual value. In the 160 west of the same shaft the lode continues large but is unproductive. The lode in the 100 east of Judd's engine shaft is large and looks promising, and is valued at 1 ton per fathom. In Sans winze sinking below the 60 fathom level the lode has declined in value, and is now estimated at ½ ton per fathom. The stopes are yielding well. Surface works are going on with regularity, and the machinery is in good working order. Estimated raisings for November, 250 tons. The tributers' returns amounted to 43 tons of mineral in the past month.

BALAGHAT MYSORE.—Captain Jos. Pryor, October 30: Ogle's shaft. Since the last report the 270 feet level south has been extended 11 feet 6 inches, or 236 feet 6 inches from the crosscut. The first 7 feet of this drivage was in a lode producing quartz of from 10 to 14 inches wide, and of a value varying from 1 to 4 ounces of gold per ton. We then unfortunately intersected an east and west dyke, on which the latter 4 feet 6 inches has been driven. About 6 feet before we met with this dyke the lode appears somewhat disordered and split, and to all present appearances the richer part has gone off in a westerly direction; on this we are now driving and have driven north or back from the dyke 14 feet, the quartz has varied from 9 to 15 inches wide of a value from 8 dwts.

½ ounce per ton.—Cyanide Works. The plant from England has now all arrived on the mine; its erection is being pushed on with all possible speed, and we hope to get it in full working order in about two months from now.

BROKEN HILL PROPRIETARY.—The manager reports that for the week ending the 14th inst 6339 tons of ore were treated, yielding 467 tons of lead, containing 140,359 ounces of silver; also 1,197 tons treated by amalgamating and leaching plants, producing 24,377 ounces silver. The price of the shares in Melbourne is, we are informed, £2 7s., buyers.

DENMARK.—The following report has been received from the manager, Mr. John Daw, jun., dated Haugesund, November 11: Section 4 (Risvig). We have unwatered the bottom of the mine and started the 500 feet level. The quartz throughout this level has been very regular and uniform in value. In the 400 feet level the stope is almost as deep as the level below. The quartz, however, has been bunchy during the last fortnight, but is of good quality. We are pushing ahead the 300 feet level north, but at present it is poor. The men lately employed in thr rise are now stoping on the said rise north, the quartz, though only a few inches wide, contains visible gold, and we are of the opinion that it will soon increase in width. In the 200 south there is a split in the lode, there being a run of quartz, both on the hanging and footwall, each about a foot wide. In another 10 metres we shall get into less disturbed ground, and in quartz of richer value. In the 100 south the quartz is 2 feet wide, and promises well for future improvements. No alteration to note in any of the other workings.—Section 5 (Gaple-kog). The bottom level as well as the main level south is being pushed ahead, each with four men, and we hope this week to strike the lode in each level lost by the old company. The rise and stope show no alteration. In the lower workings (Fladerma) the lode in the level going north shows 2 feet of quartz, in which stones with visible gold are seen almost daily. We are also stoping south of sir fathom in quartz of same width and value as in the level. We have not unwatered this mine below the main level, but shall do so as soon as we are ready with the shaft work, dry road, and tram in conjunction therewith to the main lifts. We hope to get all this work ready by Christmas. The men in the surface-cutting are working on a very fine lode. Quartz 3 feet 6 inches wide, containing a good deal of chalcopyrites and iron pyrites. We are expecting to cut into something rich almost every day. Owing to the cold weather the prospectors have been compelled to retire until the weather breaks.

FORTUNA.—Mine report dated November 6. Canada-Incosa mine. In the 110 fathoms level driving west of San Pedro's shaft the lode is regular and of a promising appearance, valued at 1 ton per fathom. Juanito's winze below the 100 fathom level now completed to the 110 fathom level. The lode was valued at 1 ton per fathom.—Los Salidos mine Taylor's engine shaft. Level progress is being made in the 212 driving east. The lode contains some stones of ore. Julian's winze below the 200 fathoms level. The lode, though well defined, is unproductive. No change of importance has taken place in the stopes. Surface works are going on very regularly. The machinery is in good working order. Estimated raisings for November, 225 tons, the tributers returned 91 tons of mineral in the past month.

TAURAKI.—October 3: I beg to hand you the following report for the four weeks ending September 21 ult.—160 level. The Iona 160 feet level crosscut was driven by four men 43 feet 6 inches. The country rock passed through was good. We have just passed through a small vein 3 inches wide dipping easterly. We propose making this crosscut forward to communicate with winze sunk in ore on a small vein carrying visible gold, and subsequently right through the Iona the small holding lately acquired by the company. We have obtained protection from the Court to man the ground by the said crosscut. In No. 2 reef south a level at the 160 was extended by two men 19 feet. This drivage will pass through on John Bull holding. No. 1 stope, No. 2 reef north was stoped by four men 15 feet in the back of the 160 feet; the reef is small, about 4 inches wide, carrying strong blotches of gold at times. No. 2 stope above the 160 feet level north on No. 2 reef was stoped by four men 13 feet; the reef is pinched up small, but may open out again any moment. The 160 feet level north on No. 2 reef was driven by two men 26 feet 6 inches. The reef in this drivage averaged about 6 inches wide, producing good crushing payable quartz. Stope in the back of the 160 south on No. 2 reef by two men was stoped 7 feet. The reef has been split here carrying colours of gold in the footwall portion. In intermediate stope from B winze south was stoped by four men 30 feet by 12 feet. This section produced very rich picked specimens of quartz, and helped considerably to make up our months' return. Two men at the 160 extended out on a small vein 38 feet which produced payable gold ore throughout. Two men extended the 160 north on No. 3 reef 21 feet. The reef averaged about 4 inches and produced payable ore. This has now been communicated to No. 2 reef in the same level, the same as was done in the 100 feet level above No. 1 stope No. 3 reef north was stoped by four men 16 feet by 14 feet, the average width of reef being 15 inches. This stope produced good quality ore, and considerable quantities of second class picked quartz gold ore.—100 feet level New Year's reef north was driven by two men 25 feet on a reef averaging 12 inches and first class stamping ores, and occasionally picked quartz was obtained through the drivage. New Year's reef south was driven by four men 11 feet in a reef averaging about 6 inches, and produced fair quality ore. A crosscut east from No. 2 north was driven by two men 20 feet 6 inches through a first class country. We have a small vein at the end, which is probably a continuation north of New Year's reef picked up. This crosscut will be pushed ahead to prove if any further vein exists in this direction. By crosscutting east in the stopes above the 100 feet, say intermediate, last month we intersected a reef which is probably New Year's reef. We have since opened on it by four men 51 feet 6 inches; the most of this drivage the reef averaged 10 inches, and produced good quality stamping ore. Four men stoped No. 2 north in back of the 100 feet in the No. 2 reef 14 feet. The reef small, 6 inches, was very patchy and very much disordered in going up towards the surface. F winze No. 3 reef north was sunk by four men 21 feet 6 inches, and communicated to the 160. The reef here averaged 12 inches wide, and produced good specimens of crushing ore. No. 4 reef west was driven on by two men 29 feet. Reef averages about 4 inches wide and poor; this should intersect Rosses reef soon, from which we shall drive to come under and communicate to Iona winze. The Iona winze was sunk by four men 11 feet. A small vein about 2 inches wide produced strong blotches of gold. This is suspended on account of water too heavy; our 160 crosscut will drain and communicate to this winze. We stamped for the four weeks ending September 21 100 tons quarts and 1189 lbs. of picked quartz, which yielded 2820 ounces 17 dwts. of melted bullion, realising £8587 10s. 11d., as per gold bills posted this mail.—(Signed) Francis Hodge.

TAURAKI.—The directors have received the following information from the manager, viz.:—Total amount crushed is 210 tons; ounces of gold, 2368; approximate cost, £1500; profit, £5750. The operations in the mine proceeding with utmost vigour and regularity. Shall commence sinking December 2.

LINARES.—Mine report, dated November 6: Pozo Ancho Mine, Taft's engine shaft. In the 200 fathoms level driving south we shall probably intersect the lode in the course of the month. The lode in the 200 west is without value at present. In the 155 west of the lode is regular and has a kindly appearance, and is valued at 1 ton per fathom. The lode in the 178 west of Warne's crosscut is large and contains spots of lead ore. The stopes continue to yield well. Surface works are going on very regularly and the machinery in good working order. Estimated raisings for November 200 tons. The tributers returned 126¾ tons of mineral in the past month.—Los Quintentos Mine, Taylor's engine shaft. In the west end the lode is disarranged by a small slide. The lode in the east continues large, and is fairly productive, valued at 1 ton per fathoms. The lode in the 150 east has now got beyond the ore ground, and driving has been suspended.—Taylor's engine shaft. The men continue to make good progress with the sinking of this shaft. Agapito's winze, sinking below the 165 fathoms level, has holed to the 185 fathoms level. The lode was valued at ¼ ton per fathom, Estimated raisings for November 150 tons. The tributers returns amounted to 38 tons of mineral in the past month.

MYSORE GOLD.—R. Hancock, October 30. Mining operations for the fortnight ending October 28.—Rowse's shaft, 1460 feet level north of crosscut west. This end has been driven 18 feet, making a total distance driven of 272 feet 6 inches.—1460 feet level north of sump winze. This level has been driven 15 feet, making a total distance driven of 433 feet. The lode having pinched out, there is nothing here now to report. The rise in the back of this level has been put up 11 feet 6 inches, making a total height of 69 feet. The lode is 4 feet wide, assaying 18 dwts. 6 grains.—1460 feet level south of Sump winze. Driving south from the bottom of the south winze. Driven 14 feet, making a total distance driven of 231 feet. We have started to drive the 1520 feet level north from the bottom of the 1460 winze south of the sump winze, to communicate with Ribblesdale's shaft when down to that depth. Driven 4 feet 6 inches, the lode is 3 feet wide, assaying 6 dwts. 12 grains.—1360 feet level south of crosscut. There are three stopes in the back of this level, the average width of the lode being 1 foot 10 inches, giving an average assay of 18 dwts. 1 grain.—1360 feet level north of crosscut. The winze in the bottom of this level has been sunk 17 feet, making a total depth of 102 feet and holed to the rise put up in the back of the 1460 north of crosscut. The lode in the stope in the back of this level is 2 feet 6 inches wide, assaying 14 dwts. 8 grains.—1360 feet level north of sump winze. This level has been driven 8 feet 6 inches, making a total distance driven of 276 feet 6 inches. The lode is 2 feet 6 inches wide, assaying 5 dwts. 21 grains.—1360 feet level south of sump winze. The rise in the back of this level has been put up 18 feet, making a total height of 89 feet. The lode is 4 feet wide, assaying 9 dwts. 2 grains.—1260 feet level north north-east. This level has been driven 11 feet, making a total distance driven of 917 feet 6 inches. The machine from the 1260 feet level south has been put to drive north in this level 200 feet north of the sump winze, so as to shorten the tramway and cut off a nasty turn, driven 11 feet. There are 8 stopes in the back of this level, the average width of the lode being 3 feet 1 inch, giving an average assay of 11 dwts. 8 grains.—1260 feet level south. This level has been driven 7 feet 6 inches, making a total distance driven of 251 feet. The lode is 6 inches wide, no assay made. There are three stopes in the back of this level, the average width of the lode being 2 feet 6 inches, giving an average assay of 1 ounce 2 dwts. 8 grains.—1160 feet level north, north east. This level has been driven 14 feet, making a total distance of 677 feet 6 inches. The lode in the stope in the back of this level is 1 feet 6 inches wide, assaying 13 dwts. 1 grain. The rise in the back of the 1160 feet level south has been put up 18 feet. making a total height of 98 feet. The lode is 1 foot wide, assaying 8 dwts. 11 grains. There are five stopes in this level, the average width of the lode being 1 foot 11 inches, giving an average assay of 1 ounce 4 dwts. 12 grains.—North of the crosscut east. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 1 ounce 15 dwts.—1060 feet level north of No. 2 crosscut, This level has been driven 21 feet 6 inches, making a total distance driven of 147 feet 6 inches. The lode is 5 feet wide, assaying 2 ounces 3 dwts. 6 grains. The winze in the bottom at the end of the crosscut has been sunk 21 feet, making a total depth of 66 feet. The lode is 5 feet wide, assaying 1 ounce.—1060 feet level south of No. 2 crosscut. This level has been driven 13 feet, making a total distance driven of 104 feet. The lode is 5 feet wide, assaying 1 ounce 6 dwts. 3 grains.—890 feet level north. The lode in the stope in the back of this level is 3 feet wide, assaying 1 ounce 15 dwts. 4 grains.—890 feet level north of crosscut. This level has been driven 25 feet 6 inches, making a total distance driven of 537 feet. The lode is 3 feet wide, assaying 19 dwts. 14 grains. The lode in the stope in the back of this level is 3 feet wide, assaying 6 dwts. 12 grains.—780 feet level north. The lode in the stope in the back of this level is 2 feet wide, assaying 17 dwts.—780 feet level north on chute. We have resumed the driving of this. Driven 2 feet 6 inches, making a total distance driven of 452 feet 6 inches. There is a little quartz, which assays 7 dwts, 19 grains. The rise in the back of this level has been put up 10 feet, making a total height of 19 feet. The lode is 1 foot wide, assaying 15 dwts. 15 grains. There are six stopes in the back of this level, the average width of the lode being 3½feet 1 inch, giving an average assay of 9 dwts. 5 grains.—620 feet level south. There are three stopes in the back of this level, the average width of the lode being 1 foot 10 inches, giving an average assay of 6 dwts. 7 grains.—620 feet level north of crosscut. The lode in the stope in the bottom of this level is 2 feet wide, assaying 1 ounce 0 dwts. 21 grains.—620 feet level south of crosscut. The lode in the stope in the back of this level is 1 foot wide, assaying 5 dwts. 21 grains.—Crocker's shaft. This shaft has been sunk 20 feet, making a total depth of 77 feet 6 inches below the 890—400 feet level south. The lode in the stope in the back of the level is 3 feet wide, assaying 3 dwts. 6 grains.—236 feet level north. The lode in the stope in the back of this level is 2 feet wide, assaying 1 ounce 6 dwts. 3 grains.—Gilbert's shaft. This shaft has been sunk 10 feet, making a total depth of 88 feet 6 inches below the 650.—520 feet level north. There are three stopes in the back of this level the average width of the lode being 2 feet wide, giving an average assay of 5 dwts. 15 grains.—520 feet level south. The winze in the bottom of this level has been sunk 5 feet 6 inches, making a total depth of 9 feet. The lode is 2 feet wide, assaying 18 dwts. 6 grains. The lode in the stope in the back of this level is 2 feet wide, assaying 17 dwts. 14 grains.—430 feet level north. The lode in the stope in the bottom of this level is 2 feet wide, assaying 9 dwts. 18 grains.—360 feet level north. The lode in the stope in the bottom of this level is 2 feet 2 inches wide, assaying 6 dwts. 12grains.—290 feetlevel north. There are two stopes in this level, the average width of the lode being 1 foot 10 inches, giving an average assay of 10 dwts. 18 grains.—180 feet level south. There are two stopes in the back of this level, the average width of the lode being 2 feet 6 inches, giving an average assay of 17 dwts. 22 grains.—Tennant's shaft, 750 feet level north of crosscut west. This level has been driven 15 feet, making a total distance driven of 174 feet 6 inches. The lode is 1 foot wide, assaying 4 dwts. 13 grains.—290 feet level south. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 1 ounce 4 dwts, 19 grains.—Schaw's shaft, 450 feet level north of crosscut. There are three stopes in the back of this level, the average width of the lode being 1 foot, giving an average assay of 18 dwts. 1 grain.—450 feet level south of crosscut, There are two stopes in the back of this level, the average width of the lode being 1 foot 9 inches, giving an average assay of 6 dwts. 20 grains.—McTaggart's shaft, This shaft has been sunk 6 feet, making a total depth of 118 feet below the 550.—550 feet level north. This level has been driven 15 feet making a total distance driven of 266 feet 2 inches. The lode is 1 foot wide, assaying 15 dwts. 15 grains. (Memo, 34 feet from the present end, 66 feet of this level was driven in a westerly direction, the driving north from the point where we turned off to the west was resumed on the 1st inst.)—550 feet level south of the crosscut west. This level has been driven 17 feet 6 inches, making a total distance driven of 231 feet 5 inches; there is nothing here to report. The winze in the bottom of this level has been sunk 3 feet 3 inches, making a total depth of 30 feet 9 inches. The lode is 2 feet 6 inches wide, assaying 3 dwts. 11 grains. There are two stopes in the back of this level, the average width of the lode being 2 feet 3 inches, giving an average assay of 13 dwts. 16 grains.—320 feet level south. There are three stopes in the back of this level, the average width of the lode being 1 foot 6 inches, giving an average assay of 5 dwts. 20 grains.—Prospect shaft No. 2. This shaft has been sunk 10 feet, making a total depth of 107 feet 6 inches.—Ribblesdale's shaft, below 1460. Sunk 8 feet 6 inches, making a total depth of 14 feet 6 inches.—1460 rise. This has been put up 3 feet 6 inches, making a total height of 65 feet.—Below 1060. Sunk 10 feet, making a total depth of 92 feet 6 inches.—Crosscut west from the 1060. This has been started, and driven 6 feet 6 inches.—Williams' shaft, crosscut east from the 173, This end has been driven 3 feet 6 inches, making a total distance driven of 154 feet.—Health good.

NAMAQUA COPPER.—Abstract of superintendent's report for September: Tweefontein mine. 125 fathom level east. This driving has now been holed. The lode is about 8 feet wide, but is small and not of much value west of the point of intersection. Worth 6 tons of ore per fathom.—105 fathom level west. There is no change at this point. Worth 2 tons of ore per fathom.—95 fathom level. As there is no improvement in the lode here, the men have been removed for the time being to No. 2 shaft.—85 fathom level west. The above remarks also apply to this level.—Stopes. No. 1 bottom of 95 fathom level east, No. 2 back of 105 fathom level west, No. 3 back of 115 fathom level west. These stopes continue to yield the usual quantities of ore, and are worth respectively 8, 9, and 10 tons of ore per fathom.—No. 2 shaft, 25 fathom level west. There is no change in value.—Stopes No. 1 and No. 2. There is no change in either the breadth or value of these stopes. Both are yielding well, and are worth respectively 9 and 8 tons of ore per fathom.—No. 4 shaft intermediate level east. The breadth of ore in this driving is about 14 feet. The ore contains rather more silica than usual, but is a good-looking body of ore. Worth 8 tons of ore per fathom.—Intermediate level west. The ore seen here is 13 feet wide. It is chiefly yellow, but is, however, a compact massive-looking lode. Worth 10 tons of ore per fathom.—No. 5 shaft. A shaft is being sunk about 60 fathoms west of No. 4. When it is deep enough for the purpose, a level will be driven from it to meet the intermediate level from No. 4 shaft.—Shipping. The *Andaman* arrived at Port Nolloth to load on November 7.—Output for October. 550 tons of ore of 26 per cent.

NUNDYDROOG.—Thomas Richards, October 26: Taylor's shaft. The 1240 feet level south has been driven 8 feet 6 inches, total distance 112 feet. Lode 4 feet wide, with stringers of quartz throughout, assays 1 dwt. 6 grains. The 1240 north has been driven 15 feet, total distance 161 feet 6 inches. Lode 2 feet wide, assays 2 dwts. 12 grains. In the stope in the back of the 1000 north the lode is 2 feet 6 inches wide, and assays 5 dwts. The 920 north has been driven 5 feet, total distance 240 feet. Lode 1 foot wide, assays 3 dwts. 18 grains. In the stope in the back of the 840 north the lode is 2 feet wide, and assays 1 ounce of gold per ton. The lode in the stope in the back of the 760 north is 3 feet wide, and assays 7 dwts. 12 grains. In two stopes between the 600 and 520 levels north the lode averages 2 feet 6 inches in width, and 8 dwts. 18 grains in assay value. The lode in the stope in the back of the 520 north is 4 feet wide, and assays 6 dwts. 6 grains. In the stope in the back of the 230 south the lode 2 feet wide assays 8 dwts. 18 grains. Main shaft has been sunk 5 feet 6 inches, total depth 44 feet below the 1080 feet level. Lode of no assay value. The 1080 north has been driven 12 feet, total distance 258 feet. Lode 4 feet wide, assays a trace of gold. The 1080 north rise has been put up 8 feet 6 inches, total height 65 feet 6 inches. Lode 1 foot 6 inches wide, assays 2 ounces 10 dwts. The 1000 north has been driven 10 feet, total distance 272 feet 9 inches. Lode 4 feet wide, assays a trace of gold The 920 north has been driven 13 feet 6 inches, total distance 208 feet. Lode 1 foot wide, assays a trace of gold. In the stope in the back of this level the lode is 7 feet 6 inches wide, and assays 1 ounce 7 dwts. 12 grains. The lode in the stope in the bottom of the 920 south is 7 feet wide, assaying 18 dwts. 18 grains, and in the stope in the back of the same level is 4 feet wide, assaying 13 dwts. 18 grains. In two stopes in the back of the 840 south the lode averages 3 feet 6 inches in width, and 15 dwts. 15 grains in assay value. The 680 north has been driven 16 feet, total distance 441 feet 6 inches. Lode 4 feet wide, of no assay value. The 520 north has been driven 16 feet, total distance 147 feet 3 inches. Lode of no assay value. Kennedy's shaft has been sunk 7 feet 6 inches, total depth 108 feet 6 inches below the 600 feet level. The 600 south rise has been put up 7 feet 9 inches, total height 17 feet 9 inches, and communicated with north shaft. A new rise has now been commenced in the back of this level at 175 feet from the shaft, where the lode is 6 inches wide, assaying 1 ounce 1 dwt. 6 grains. The 600 north has been driven 9 feet 9 inches, total distance 247 feet 3 inches. Lode 5 feet wide with stringers of quartz throughout. Assays a trace of gold. The 600 north rise has been put up 21 feet 6 inches, total height 89 feet 6 inches. Lode 2 feet wide assays 15 dwts. The 520 south rise has been put up 17 feet, total height 101 feet 6 inches, and communicated with the 440 feet level. At the point of communication the lode is 2 feet 6 inches wide, containing a trace of gold, The 520 south crosscut west (near north shaft) has been extended 3 feet 6 inches, total distance 22 feet; no change. The 440 south has been driven 10 feet, total distance 1152 feet, Lode of no assay value. In the stope in the back of this level the lode is 5 feet wide assays 1 ounce. The 440 south crosscut west has been driven 4 feet 6 inches, total distance 10 feet; no change. In the stope in the bottom of the 440 north the lode (part carried) is 11 feet wide, and assays 16 dwts. 6 grains. The 370 south has been driven 21 feet 6 inches, total distance 879 feet. Lode 1 foot 6 inches wide, assays 2 dwts. 12 grains. The 370 south rise has been put up 6 feet 6 inches, total height 59 feet, Lode 1 foot 6 inches wide, assays 5 dwts. The 370 north crosscut west has been extended 10 feet, total distance 387 feet 6 inches. No change, In the stope in the back of the back north the lode is 9 feet wide, and assays 3 ounces 7 dwts. 12 grains. The 300 south has been driven 13½ feet, total distance 800 feet. Lode 2 feet wide, of no assay value. In the stope in the back of this level the lode is 3 feet wide, assay a 2 ounces 11 dwts. 6 grains. The 300 south crosscut east has been extended 3 feet, total distance 18 feet 6 inches. Some stringers of quarts have been met with. The 300 north rise has been put up 10 feet, total height 52 feet Lode 1 foot wide, assays 2 dwts. 12 grains. The 230 south has been driven 18 feet 6 inches, total distance 134 feet 6 inches from north shaft. Lode 4 inches wide, assays 7 dwts. 12 grains. The 230 north rise has been put up to 10 feet 6 inches, total height 46 feet 6 inches, and communicated with the 160 feet level. At the point of communication the lode is 3 feet wide, and assays 3 dwts. 18 grains. In the stope in the back of this level (the 230 north) the lode is 3 feet wide, assays 8 dwts. 18 grains. The 160 south has been driven 3 feet 6 inches, total distance 413 feet. Lode 4 feet 6 inches wide, assays a trace of gold. In the stope in the back of the 160 north the lode is 3 feet wide, and assays 1 ounce 2 dwts. 12 grains. North shaft has been sunk 5 feet, total depth 95 feet, and communicated with the rise in the back of the 600 south. At the point of communication the lode is 6 inches wide, assays a trace of gold.—Old mill samples. Pulp, 1 ounce 1 dwt. 6 grains; tailings, 3 dwts. 18 grains.—New mill samples. Pulp, 1 ounce 6 dwts. 6 grains, tailings, 4 dwts. 9 grains.

RANDT REEFS.—The following extract is from the manager's letter, dated October 19: The reef in present are thoroughly well defined, I shall commence sinking deeper in the old shafts as soon as possible. The débris takes some little time to remove, but as soon as this is completed sinking will proceed rapidly, I made three assays last week from the ore taken from the present workings, and obtained a return of 14 dwts. per ton. I am pleased to inform you that, notwithstanding the long drought experienced in this neighbourhood, there is ample water on your property for all purposes. The directors also received the following cable; I have discovered another reef on property of an average value of ¼ ounce per ton. Reef is a splendid one, and extends full length of property. This makes a total of 8 reefs on the property.

WAIHI GRAND JUNCTION.—Under date October 4 the manager reports:—In the west Waihi shaft we are down 92 feet. The ground is of same character as when I last reported, only much softer, and I confidently hope being able to sink 10 to 12 feet per week. My intention is to sink 150 feet before opening any crosscut. The Grand Junction engine shaft is down about 90 feet; the character of the ground continues much the same; the fixing of the pump and pipes occupied two days of the week.

KOMATA REEFS.—The directors have received the following information from the manager, viz.: New reef value per ton £14 13s. Reef looking well.

KAPANGA.—The directors have received the following information from the manager, viz.:—Shaft has been sunk 6 feet, delayed owing to fixing pitwork and pumps. Have crushed 66 tons, yielding ounces of gold.

AUSTRALASIAN MINING COMPANY.—Fortnightly report of Mr. John James, manager, dated September 26: For the past fortnight Bishop and party have sunk the shaft 30 feet, total 475 feet; the first 22 feet was through boulder conglomerate, then a plumbago floor about an inch thick was passed through, then 2 feet of very dark conglomerate, under this is boulder conglomerate in which we are still sinking. The water keeps about the same as last reported.

ALMADA AND TIRITO.—Report for the fortnight ending October 12:—Dios Padre. The lode in the 280 feet level driving north continues without ore, and the lode is small.—Guadalupe. The lode in the 150 feet level driving north of the No. 1 shaft is large, but contains no ore at present. The drivage south at this level has also fallen off in value during the past week, and owing to the large amount of water issuing from the forebreast our progress is slow. The lode at present is yielding green ore which I estimate will give 30 ounces silver per fathom. The lode in the 150 feet level driving north of No. 2 shaft is massive and very hard, composed chiefly of quartzite and black ore for 4 feet wide. It is yielding at present 80 ounces silver per fathom. There is no ore at present in the 150 drivage south of No. 2 shaft. The lode is well defined and carries a very smooth hanging-wall with an underlie of 55° east. The lode in the tunnel driving south of Ibarras' cutting has a nice appearance and shows occasional spots of ore.—Stopes. These continue to yield paying quantities of ore.—(Signed) John Nute.

BAYLEY'S REWARD No. 1 SOUTH.—Mining report, dated Coolgardie, September 21: Main shaft. 170 feet level north drive. We have got the eastern wall which came round suddenly and completely cut off the stone. The reef up to the slide in the face averages 6 feet wide, though the quartz is not of very high grade. We propose putting in a crosscut west to cut the make of stone we are working from the western crosscut at 120 feet level, and at the same time sink a winze from the latter level.—120 feet level. North drive from crosscut extended 12 feet, total 21 feet. The reef widened out during the week to 5 feet wide, and is now 4 feet in the face, very nice friable stone, though since the reef has widened out so much the quality is not apparently so good, though I estimate it to return an ounce or thereabouts. We have commenced stoping south from the winze, and all the way have had nice stone. We will also commence a north stope over the present drive this week.—Battery. We have up till now only run two shifts for the last month or so, but owing to the width of the reef and easy work I think we can run this week three shifts without increasing the number of hands.—(Signed) Tom V. Browne, acting manager.

BAYLEY'S REWARD CLAIM.—Mining report, dated Coolgardie, September 21: Report for week ending September 20: Sylvester shaft No. 5 level 380 feet. South drive extended 13 feet, total 195 feet. Face of drive still between the two walls we have been following all along. No change in character of rock, and the ground is again very dry and on the west side extremely hard. Very little mineral showing.—No. 2 level 100 feet north stope. We are breaking very fair stone here, and occasionally come across small patches of gold. Quartz from here trucked straight to battery; width of reef about 6 feet. South stope at this level not looking so well and a very small quantity of stone left to break before coming to the fault.—Begelhole shaft. North stope 25 feet level looking very well and good stone throughout the week has been taken from here. Have almost stoped up to end of drive.—Everard air shaft, No. 1 north stope. Size of lode about 2 feet; very fair stone showing gold occasionally, but always in a finely disseminated state.—No. 2 stope same level (60 feet). Size of lode 4 feet; rather a poorer grade and stone white and glassy. With these stopes and drives excepted no other work is being done at present, though we are preparing to drive on the reef at the bottom level (380 feet) north in the stone showing about 10 feet wide. We expect to come on some gold here as in driving south. We have had one or two trials lately with the explosive "Roburite," but though giving splendid results in some cases it does not generally suit the ground in this mine.—Machinery. All working well and satisfactorily. The battery has been running full time, but owing to the fact that we are trying extremely fine grates, the crushing in quantity is not up to our old average.—, (Signed) Tom V. Browne, acting manager.

BRITISH BROKEN HILL PROPRIETARY.—Mining manager's report for the week ending September 25: Blackwood (No. 1) shaft. 300 level. West crosscut lengthened 7 feet, total distance from plat 42 feet. Face unchanged.—200 level. The crosscut started eastwards from south drive down winze in No. 1 west crosscut was driven 13 feet. Face carrying medium sulphides. We mined 20 tons, averaging 18 per cent. lead, 21 per cent. zinc, and 14 ounces silver per ton. West crosscut down western extension winze extended 6 feet through splendid sulphide ore, making total length 78 feet. We mined in driving 18 tons, averaging 25 per cent. lead, 28 per cent. zinc, and 18 ounces silver per ton, and in cleaning up after blasting we obtained 4 tons carbonates, assaying 20 per cent. lead and 22 ounces silver per ton. Winze in long crosscut sunk 7 feet, total depth 60 feet. Bottom showing country rock carrying patches of sandstone. Have started a northerly drive in long crosscut at point about 20 feet back from winze in a splendid face of sulphide ore, In cleaning up preparatory to starting we obtained 10 tons sulphides, averaging 27 per cent. lead, 23 per cent. zinc, and 16 ounces silver per ton.—Howell (No. 2) shaft. 300 level. West crosscut advanced 4 feet, total distance from plat 126 feet. Face continued in extremely hard lode, matter carrying quartzite, garnets, and sandstone. East crosscut was lengthened 9 feet, total length 34 feet. Face getting harder again and sulphide lode badly mixed up. We mined in driving 13 tons sulphides, averaging 31 per cent. lead, 19 per cent. zinc, and 9 ounces silver per ton.—Marsh (No. 6) shaft, 2nd level. The various faces down winze stopes look fairly well and are returning usual supply of carbonate ore. Fossicking operations in search of further sulphides of ore are being continued on the most promising portions of the lode. We broke 29 tons carbonate ore, averaging 22 per cent. lead and 52 ounces silver per ton.—Junction 300 level. Uprise risen 7 feet, total height 77 feet. Roof still in lode formation.—General. Rivetters are making good progress with the air receiver, and good headway made with work of laying pipes down mine. Expect agent to arrive in a day or two.—Week's assays: Carbonates. Lead from 13 to 58·5 per cent., and silver 14·7 to 123·4 ounces per ton. — Sulphides. Lead from 14 to 43 per cent., zinc 13·33 to 30·2 per cent., and silver 6·3 to 19·7 ounces per ton.—Mining manager's report for the week ending October 2: Blackwood shaft, 300 level. West crosscut from plat advanced 5 feet, total length 47 feet, face unchanged. 200 level east crosscut in south drive down No. 1 winze extended 14 feet, total 27 feet, fair sulphide ore showing in face. We mined from this drive 25 tons, assaying 19 per cent. lead, 20 per cent. zinc, and 13½ ounces silver per ton. West crosscut down western extension winze lengthened 2 feet, total distance 80 feet, and connection with long crosscut winze. We mined 3 tons sulphide, assaying 24 per cent. lead, 29 per cent. zinc, and 16 ounces silver per ton. Long crosscut winze sunk 6 feet, total depth 66 feet; bottom still in country intrusion. North drive started in long crosscut driven 10 feet, through fair grade sulphides of which we mined 32 tons, averaging 23 per cent. lead, 25 per cent. zinc, and 15 ounces silver per ton.—Howell shaft. 300 level west crosscut extended 4 feet, making total distance from plat 130 feet; face still carrying lode material of a very hard nature. East crosscut lengthened 9 feet, total 43 feet; this appears to have passed through lode. Are now starting work in roof of crosscut where lode looks promising in order to prove same. We saved 2 tons sulphides in the crosscut, assaying 25 per cent. lead, 19 per cent zinc, and 7 ounces silver per ton.—Marsh shaft, 2nd level. We mined from the winze stopes below the level 44 tons carbonate ore, averaging 33 per cent. lead, and 45 ounces silver per ton. The prospecting drive along footwall of lode has been driven 27 feet all through lode matter, but, so far, without finding anything of importance.—Junction 300 level: Uprise risen 8 feet, total height 85 feet, expect to connect with Mark's workings in a few days.—Surface. Good progress is being made with the erection of rock-drilling plant. Most of the machinery has now arrived.—Ore shipments. The following lot sulphide ore was shipped during week to Block 14 mine, viz., 124 tons net, containing 32½ tons lead, 1736 ounces silver.—Week's assays. Carbonates, lead frm 17·5 to 35 per cent. lead, and 21 to 99·1 ounces silver per ton. Sulphides from 13·5 to 30 per cent. lead, 19·35 to 30 per cent. zinc, and 6·2 to 17·3 ounces silver per ton.

CHAMPION REEF.—Fortnightly report of Captain James Rowe, superintendent, dated October 21:—Dalyell's shaft. This shaft has been sunk 13 feet, total depth 760 feet.—Garland's shaft. There is no sinking to report. We have been engaged connecting the 740 new plunger pole, which is now working satisfactorily. Lode in the shaft same as last report. The 940 feet level north of shaft has been driven 28 feet 9 inches, total length 140 feet 9 inches. Lode 2 feet 9 inches, assaying 2 ounces 2 dwts. 22 grains of gold per ton. The 940 feet level south has been driven 26 feet 3 inches, total length 115 feet 9 inches. Lode 1 foot 3 inches, assaying 15 dwts. 5 grains of gold per ton. The 840 feet level north has been driven 24 feet 6 inches, total length 590 feet 9 inches. Lode 1 foot 3 inches, assaying 16 dwts. 12 grains of gold per ton. No. 4 rise in the back of level risen 20 feet 9 inches, total height 31 feet. Lode 2 feet 6 inches, assaying 18 dwts. 1 grain of gold per ton. The 740 feet level north has been driven 25 feet 9 inches, total length 790 feet 9 inches. Lode 3 feet, assaying 1 ounce 18 dwts 20 grains of gold per ton. The 630 feet level north driven 28 feet 6 inches, total length 934 feet 9 inches. Lode 2 feet 9 inches, assaying 2 ounces 3 dwts. 14 grains of gold per ton. No. 7 rise in back of level risen 18 feet, total height 29 feet 6 inches. Lode 7 feet, assaying 1 ounce 11 grains of gold per ton. Ribblesdale's shaft has been sunk 3 feet 3 inches, total depth 657 feet 9 inches. Lode 9 inches, assaying 13 dwts. 1 grain of gold per ton. The 640 north has been driven 26 feet 3 inches, total length 170 feet 3 inches. Lode 1 foot, assaying 1 ounce 16 dwts. 12 grains of gold per ton. The 640 feet level south has been driven 24 feet, total length 145 feet. Lode 6 inches, assaying 1 ounce 2 dwts. 16 grains of gold per ton. Crosscut east of this level driven 16 feet, total length 44 feet. At this point we intersected east part of the lode, and commenced to drive south on same driven south of crosscut 6 feet. Lode 1 foot, assaying 18 dwts. 12 grains of gold per ton. The 540 feet level south of crosscut east of 540 south of shaft has been driven 28 feet 6 inches, total length 420 feet 6 inches. Lode 3 feet 6 inches, assaying 13 dwts. 6 grains of gold per ton. No. 2 rise above this level risen 11 feet 6 inches, total height 19 feet 6 inches. Lode 1 foot 3 inches, assaying 11 dwts. 18 grains of gold per ton.—Carmichael's shaft. The 540 feet level north of crosscut east of 540 north of shaft on east part of lode has been driven 22 feet 9 inches, total length from crosscut 176 feet 9 inches. Lode 1 foot 6 inches, assaying 2 ounces 8 dwts. 2 grains of gold per ton. No. 2 rise in back of level risen 10 feet 3 inches, total height 37 feet 9 inches. Lode 2 feet 6 inches, assaying 1 ounce 10 dwts. 12 grains of gold per ton. Crosscut east of 440 north of shaft has been driven 15 feet 9 inches, total length, 61 feet 9 inches. As mentioned in last report, we cut what we supposed to be the east part of lode, but on getting through it we thought it wise to continue the crosscut for a short distance, as this was very small, but as yet nothing further has been met with.—Rowe's shaft. This has been sunk 6 feet 9 inches, total depth below the 515 feet level 44 feet 6 inches, lode 2 feet, assaying 1 ounce 16 grains of gold per ton. The 515 feet level north has been driven 22 feet 3 inches, total length 148 feet. Lode 1 foot 3 inches, assaying 2 ounces 13 dwts. 12 grains of gold per ton. This is now up to north boundary, and suspended. New winze below 515 feet level north has been sunk 7 feet. Lode 2 feet 6 inches, assaying 2 ounces 5 dwts. 8 grains of gold per ton.

CHIAPAS.—Mine report for fortnight ending September 30: Santa Fe hill drift No. 3 driven 9 feet; total, 143 feet 6 inches. Santa Fe hill drift crosscut west driven 3 feet; total, 3 feet. Santa Fe hill drift No. 2 driven 12 feet; total distance, 42 feet. Cut under open cut above, but found nothing. Taylor north-east crosscut driven 10 feet of crosscut in. No change. Taylor main extension driven 6 feet; total distance, 666 feet. No change. Assays: 12 dwts. silver and traces of gold. Providencia crosscut east No. 1 driven 13 feet; total, 200 feet. Assays: 5 dwts. 12 grains gold, 9 ounces 18 dwts. 12 grains silver, 4·4 per cent. copper. San Juan crosscut driven 14 feet; total, 85 feet. On the point of holing through into Providencia crosscut east No. 1. Assays: 14 dwts. gold, 11 ounces 15 dwts. silver, and 5·2 per cent. of copper. A trial run on this ore in mill has given very good results. This run of ore looks very promising, and is an important discovery, though we are running apparently almost on the cap of it. Providencia Aver crosscut west driven 4 feet; total distance, 38 feet. Struck outer contact rock as in the Aver. Providencia Aver drift, timbering one stope commenced in bottom, ore 10 to 12 feet wide.—Extraction. Old Providencia stoped 188 tons. Assays: 1 ounce 9 dwts. gold, 10 ounces 17 dwts. silver, 8·1 per cent. copper; even better than this, as ore got mixed with a fall. Santa Fe stopes stoped 342 tons. Assays: 3 dwts. gold, 4 ounces 4 dwts. silver, 1·62 per cent. copper, on higher portion of stopes, ore mostly taken from lower stopes. Taylor No. 3 stope 24 tons stoped. Assays: 10 dwts. gold, 5 ounces 17 dwts. silver, 2·3 per cent. copper. Santa Fe hill, extracted 237 tons. Assays: 1 ounce 8 dwts. 12 grains gold, 9 ounces 6 dwts. 12 grains silver, and 3·66 per cent. copper. Providencia Aver No. 1 stope stoped 62 tons. Assays: 8 dwts. 12 grains gold, 5 ounces 18 dwts. 12 grains silver, and 3·16 per cent. copper.—San Juan crosscut and Providencia crosscut east No. 1 extracted 49 tons. Assays: 14 dwts. gold, 12 ounces 7 dwts. silver, 6·74 per cent. copper.

COROMANDEL.—Superintendent's report for fortnight ending October 19:—Prospect shaft, 500 feet level south. The crosscut east from this level has been driven 20 feet, making its total length 229 feet. There is no change in the ground.—200 feet level north. During the fortnight a winze has been started to sink below the level on the shoot discovered west of the dyke. This has been sunk by hand labour 4 feet. Lode 2 feet 6 inches wide, assaying 12 dwts. of gold per ton.—East shaft, 500 feet level north. The winze in the bottom of this level has been sunk 10 feet, total 45 feet 6 inches. Lode 3 feet wide of solid quartz, assaying 15 dwts. of gold per ton.—320 feet level north. The crosscut west of this level has been driven 10 feet 6 inches, total 18 feet 6 inches, and has intersected a small branch of quartz which shows a trace of gold in the pan.—320 feet level south. The rise in back of this level has been advanced 29 feet, total 80 feet above level. Lode is 1 foot 6 inches wide and assays 1 ounce 10 dwts. of gold per ton.—200 feet level north. Driven 45 feet feet, total 191 feet 6 inches. The quartz in present end is 1 foot wide, and assays 5 dwts. of gold per ton.—200 feet level south. Driven 13 feet, total 259 feet. Lode 1 foot 3 inches wide, assaying 8 dwts. of gold per ton.—Rise back 200 feet level south. Risen 27 feet, total 91 feet. Lode 5 feet wide, of mixed character and worth 3 dwts. of gold per ton.

CAPE COPPER.—Ookiep—Captain Henwood, September 30: The stope in bottom of 130 fathom level east and west of winze is producing stones of copper ore, but not to value. The rock in the 92 fathom crosscut (No. 19) south-west of main east level is composed chiefly of gneiss. The 92 fathom level east of No. 19 level is yielding occasional stones of copper ore. The ground in the drive in the back of the 68 fathom level south of stope south-east of No. 16 winze is still composed of quartz, iron, and copper ore, the latter not in sufficient quantities to value. The rock in the 52 fathom level west of old shaft has during the month presented a few spots of copper ore.—Trial Mines—Captain Henwood, September 30: Nababeep south. There is no material change to notice in the 59 fathom crosscut north of No. 1 winze; the ground is still disseminated with copper ore throughout.—Spectakel. The rock in the 46 fathom crosscut north on the flookan course is yielding a little saving stuff, and the ground in the 46 north east of the flookan course contains spots of copper ore.—Copperberg. The skiproad, &c., being completed to the 10 fathom level, we have resumed the 10 fathom level west of whim shaft; the rock in the forebreast is yielding occasional stones of copper ore. We have also started crosscuts north and south at the 10 fathom level about 18 fathoms west of whim shaft; the ground in the north crosscut contains spots of copper ore. Nothing of importance having been met in the 30 fathom crosscut south of No. 1 trial shaft; it has been suspended, and the men put to drive north from bottom of shaft at this depth. The rock in bottom of No. 2 trial shaft sinking below the 15 fathom level is yielding saving stuff.—Ookiep east. The rock in the 80 fathom level west of south east crosscut is unproductive.—Returns for September. Ookiep, 2260 tons of 19 per cent. Spectakel, 115 tons of 30 per cent.—Arrivals at Port Nolloth. The ss. *Cedar Branch* and the *Andaman*.—Tilt Cove. East Mine. Output for September, 4600 tons of 3·80 per cent. wet assay.—Arrivals at Swansea. The (ss.) *Annandale* with 1590 tons of regulus, (ss.) *Austerlitz* with 1690 tons of regulus, and (ss.) *Ingram* with 1815 tons of ore.

OOREGUM. — Superintendent's report for fortnight ending October 22: Taylor's shaft sunk 5 feet, total depth below the 760 feet level 99 feet. Lode 1 foot 2 inches wide, assay value 16 dwts. 17 grains. The sinking was retarded four days whilst some dangerous ground was being taken down from the hanging wall, and timber fixed for permanent security. The 760 feet level south driven 25 feet, total 335 feet 6 inches. Lode 1 foot 6 inches wide, assay value 2 ounces 1 dwt. 9 grains. No. 1 winze 760 feet level south sunk 3 feet 3 inches, total depth 27 feet 9 inches. Lode 2 feet 6 inches wide, assay value 2 ounces 7 dwts. 2 grains. No. 2 winze 760 feet level south sunk 5 feet, total 24 feet 6 inches. Lode 2 feet wide, assay value 3 ounces 5 dwts. 8 grains. No. 2 rise 760 feet level south risen 8 feet, total 12 feet. Lode 1 foot wide, assay value 2 ounces 14 dwts. 10 grains. The 660 feet level south driven 13 feet, total 453 feet. Lode 9 inches wide, assay value 1 ounce 12 dwts. 16 grains. No. 2 winze 660 feet level south sunk 3 feet, total 38 feet 9 inches. Lode 3 inches wide, assay value 16 dwts. 8 grains No. 3 winze 660 feet level south commenced, sunk 6 feet 6 inches. Lode 1 foot 4 inches wide, assay value 17 dwts. 10 grains. No. 3 winze 560 south sunk 3 feet, total 71 feet. Lode 4 inches wide, assay value 1 ounces 17 grains. No. 4 winze 560 feet level south sunk 2 feet 9 inches, total 40 feet 9 inches. Lode 3 inches wide, assay value 1 ounce 2 dwts. 21 grains.—Wallroth's shaft. The water is being drained from the 1060 feet level, and at the present rate we expect to reach the bottom of shaft by the end of current week. The 960 feet level south driven 26 feet, total 468 feet 6 inches. Lode 1 foot wide, assay value 18 dwts. 2 grains. No. 2 winze 960 feet level south sunk 4 feet 3 inches, total 29 feet 6 inches. Lode contracted, no sample. The 860 feet level south driven 31 feet, total 782 feet 3 inches. Lode 6 inches wide, assay value 13 dwts. 2 grains. No. 3 winze 860 feet level south sunk 3 feet 3 inches, total 73 feet 3 inches. Lode 1 foot wide, assay value 15 dwts. 8 grains. No. 4 winze 860 feet level south sunk 6 feet 3 inches, total 43 feet. The lode is 1 foot 6 inches wide, assay value 6 dwts. 12 grains. No. 3 winze 760 feet level south sunk 5 feet, total 62 feet 6 inches. Lode 9 inches wide, assay value 4 dwts. 8 grains. No. 5 winze, 760 feet level south sunk 4 feet 3 inches, total 19 feet 3 inches. Lode 6 inches wide, assay value 5 dwts. 10 grains. No. 6 winze 760 feet level south sunk 5 feet, total 21 feet. Lode 2 feet wide, assay value 1 ounce 2 dwts. 21 grains. No. 2 rise 760 feet level south risen 7 feet 3 inches, total 30 feet 9 inches. Lode 1 foot wide, assay value 6 dwts. 12 grains. No. 2 winze 760 feet level north sunk 4 feet 3 inches, total 88 feet 9 inches. Lode 1 foot wide, assay value 5 dwts. 10 grains. No. 1 winze level south from crosscut east 460 feet level south sunk 4 feet, total 28 feet. Lode 9 inches wide, assay value 4 dwts. 8 grains. The level north from crosscut east 460 feet level south driven 15 feet 6 inches, total 75 feet. Lode 2 feet wide, assay value 10 dwts. 21 grains. No. 1 rise 360 feet level south risen 8 feet 3 inches, total 28 feet 3 inches. Lode 1 foot wide, assay value 7 dwts, 15 grains. No. 5 winze 280 feet level north sunk 2 feet, total 47 feet 6 inches. Lode small, no sample. Low's shaft sunk 6 feet, total 776 feet 4 inches. The 710 feet level south driven 16 feet, total 153 feet. Lode 4 feet wide, assay value 9 dwts. 19 grains. No. 1 winze 710 feet level south sunk 8 feet 6 inches, total 15 feet 6 inches. Lode 4 feet, carried assay value 5 dwts. 20 grains. The 710 feet level south driving north on lode from point of intersection driven 11 feet, total 45 feet. Lode 4 feet wide, assay value 6 dwts. 21 grains. No. 1 winze 610 feet level south sunk 4 feet, total 97 feet. Lode 2 feet wide, assay value 8 dwts. 19 grains. No. 1a winze 610 feet level south sunk 4 feet, total 10 feet. Lode 9 inches wide, assay value 1 ounce 17 grains.—Probyn's shaft. The 1150 feet level north driven 8 feet, total 12 feet, from the end of which a crosscut has been commenced east, and driven 2 feet towards the lode. The level east of south 1050 feet level south driven 11 feet 6 inches, total 35 feet. Lode disordered chiefly schist, with occasional stringers of quartz. No. 1 winze 1050 feet level north sunk 2 feet 6 inches, total 72 feet 6 inches. Lode continues small; no sample. No. 1 winze 950 feet level south sunk 2 feet, total 95 feet 9 inches. Lode very small; no sample. Throughout the mine we are working 62 stopes, which continue to yield quartz of the average quality. All will be measured at end of month, and particulars given in next report.

GLEN ELGIN.—The managing director in New South Wales under date October 4, reports: I have received word from the mine that they have crushed 17 tons of stone raised from the bottom of No. 3 tunnel, which yielded 27 ounces 9 dwts. of free gold and 2½ tons of pyrites (concentrated). In No. 2 tunnel the reef is 1 foot 6 inches wide, of highly auriferous appearance, and very heavily charged with pyrites, and, as a rule, the more heavily the quartz is charged with pyrites the richer it is in gold. In this tunnel we have now a shoot of stone over 50 feet in length, and still continuing, being, as stated above, 1 foot 6 inches wide in the end of the tunnel, and all the way the manager reports that the reef is larger at the bottom of the tunnel, and that it is larger in No. 2 than in No. 3 tunnel, showing that it is increasing as it goes down; and if each shoot improves as this is doing, when they reach the depth of No. 1 tunnel (the lowest level) they will be very good, and I think we may reasonably expect this, because in Charters Towers (Queensland) the reefs have improved in depth, and I have good reason for believing that the same geological formation continues right through to Glen Elgin.

GOLD FIELDS OF MYSORE.—Mine report for fortnight ending October 22: Oriental lode. South shaft. The 280 feet level end north of crosscut on West Balaghat lode has been driven 10 feet 6 inches, total 99 feet 6 inches. The lode is 4 feet wide, carrying 15 inches of highly mineralised rock against the hanging-wall, the remainder is chiefly black rock, which is intermixed with stringers of quartz, its assay value being 1 dwt. 17 grains of gold per ton.—The 280 feet level. End south has been driven 12 feet 2 inches, total 111 feet 6 inches. The lode is 4 feet wide, chiefly of black rock, intermixed with stringers of quartz, assaying 2 dwts. 1 grain of gold per ton.—Oriental lode. Rise stope north of shaft quartz 10 feet wide, assaying 6 dwts. 7 grains of gold per ton. Rise stope south of shaft quartz 10 feet wide, assaying 5 dwts. 16 grains of gold per ton.—380 feet level north. No. 1 rise risen 11 feet, total height 25 feet 6 inches. The lode is 5 feet wide, carrying 2½ feet of quartz, assaying 5 dwts. 2 grains of gold per ton. No. 2 rise going up against the middle shaft risen 8 feet 6 inches, total 39 feet 6 inches. The lode is getting small and does not give any quartz.—The 380 feet level south. No. 1 rise 8 feet 4 inches, total 18 feet 6 inches. The lode is 5 feet wide, of a mixed nature, assaying 4 dwts. of gold per ton.—The 470 feet level north. Sinking for a lodge for the water. Quartz 2 feet wide, assaying 5 dwts. 2 grains of gold per ton.—Middle shaft. Fair progress is being made in cutting down end of tpe shaft to make room for fixing the plunger lift at the 235 feet level.

GOLDEN DOVE.—The following is an extract from our manager's letter, dated October 16: We got the tackle for machinery last week, and have got 14 tons across up to to-day. Have now only the boiler and two mortar boxes to get across, and expect we shall have these over by Friday. Have now 28 boys working on the mine, most of them have been engaged in crossing the machinery. We have one white man and four boys working in the drive, and one white man, and two boys working on Marias.

TALISMAN GOLD.—The company's manager at Black Flag, W.A., reports under date October 5: The crosscut at the 70 feet level main shaft is now in 195 feet, and we have passed through 25 feet of lode formation, and the lode is in a decomposed state, being a mixture of iron quartz and schist, carrying fine gold. I have discontinued driving any further for the present, as the air is getting very bad; have started a new shaft on the same line 2½ chains north of main shaft, and expect to cut the lode at a depth of 20 feet.—Talisman West. The main shaft is down 45 feet in soft schistose country; we have cut through some leaders carrying coarse and fine gold.

KINSELLA.—Mining report for fortnight ending October 3: Since my last report very little driving has been done on the lode. At No. 1 north shaft, 43 feet level, 10 feet has been driven north, producing about 30 tons of stone of fair quality. A truck road has been laid down from face of this drive to main shaft, which will make things handier to carry on the drive or break down the stone left overhead. We have driven 211 feet along this block of stone, with an average width of 6 feet, and as near as I can judge about 20 feet from back of drive to cap of lode. This should give us about 2000 tons of stone, and I should expect a return from it of 1 ounce to the ton at least. The men taken from No. 1 north shaft have been put into main shaft. The water has been bailed out of shaft, and the men have been engaged in clearing up south crosscut and laying truck road into the face at the 100 feet level. We expect to cut the lode in a few days, and I think it would be wise to concentrate the work as much as possible at this point of mine. We have cleaned out the bottom of shaft or well, which is about 20 feet below the 100 feet level. This has been a very difficult job, the supply of water being much stronger than we expected; the result of a test for 32 hours was a little over 1000 gallons per hour. Now the well is cleaned out I find it will take four hours to fill it with the incoming water. At present we have enough water to supply a 20 head stamp mill, but as we are only 13 feet under water I think we may expect it to decrease, when it would be necessary to sink the shaft deeper, but I hope we will have a set of pumps in the shaft to sink with. The winding shaft is working splendidly, boilers steaming well, and everything going nicely and smoothly. The work at the battery is now well forward, and we are pushing on with all speed, and in a week or two hope to have it in full swing.

KEMPINKOTE.—Mine report for fortnight ending October 21: —Garland's shaft has been sunk 10 feet 3 inches, total depth from surface 447 feet 9 inches. About 6 feet from bottom of shaft a wall of soft schist was met with in the south end of shaft running east and west and dipping north. We have about 2 feet of this in the bottom of shaft. We are carrying about 9 feet of the lode of very low grade ore. 345 north drive No. 1 crosscut east has been driven 18 feet, total distance from main level 34 feet 6 inches; 32 feet from main level we met with soft schist; this continues. 345 south drive has been driven 30 feet 3 inches, total distance from main crosscut 184 feet. The lode in the end full width of drive assaying 23 grains of gold per ton of stuff.—345 south drive No. 1 crosscut east. 160 south of main crosscut has been driven 7 feet 6 inches, total distance 7 feet 6 inches. The ground in the end is soft schist.—245 north drive No. 2 winze. 50 feet west of footwall No. 1 crosscut has been sunk 6 feet 3 inches, total depth 27 feet 6 inches. Lode in the bottom full size of winze assaying 1 dwt. 14 grains of gold per ton of stuff.—245 south drive has been driven 23 feet, total distance from main crosscut 441 feet. Lode in the end 2 feet wide, giving an average assay of 3 dwts. 8 grains of gold per ton of stuff.—245 south drive No. 2 crosscut west. 280 feet south of main crosscut has been driven 6 feet 9 inches, total distance from main level 36 feet 9 inches, At this point we met with hard black schist, and the drivage was suspended.—Henty's shaft has been sunk 4 feet, total depth from 358 feet. No alteration in the ground in the bottom of shaft. 341 crosscut east has been driven 15 feet 6 inches, total distance from shaft 44 feet 6 inches. 39 feet east of shaft soft schist was met with upon this. This machine has driven south 10 feet 6 inches, total distance 10 feet 6 inches. The ground in the end is soft schist. 258 south drive No. 1 crosscut west, 208 feet south of main crosscut has been driven 6 feet 9 inches, total distance 26 feet. Lode in the end full size of the drive assaying 23 grains of gold per ton of stuff. 173 No. 1 crosscut west 100 feet north of shaft has been driven 8 feet 3 inches, total distance from main level 46 feet. The ground in the end is hard schist.

MOUNT ROWE CONSOLIDATED.—The manager reports as follows:—Lease 988. The drives in the shaft (87 feet level) are now in north 55 feet and south 50 feet. The stone contains fine gold and has and there visible gold. As depth is attained it will no doubt prove to be a valuable lode. It varies in width from 1 foot 6 inches to 2 feet 6 inches from wall to wall.—Lease 754. Crosscut at 150 feet level has been put in 50 feet and is now in hard country, and as it is badly aired at the face and men are scarce, I have brought them back and have started them north and south along the reef which is 2 feet 6 inches wide at this point. The reef looks first-class, and rich stone may be struck at any time.—Eight days after the above report the manager telegraphed as follows:—Lease 754. Have driven on the vein a distance of 16 feet at the 150 feet level. The average thickness of the quartz is 4 feet 2 inches. Have made many pannings and have always found gold. The ore will certainly average 1 ounce.

NO. 7 NORTH-EAST QUEEN.—The following fortnightly report has been received from the mine, dated Charters Towers, September 27: On the 24th inst. Mower and party crushed 12 tons 7 cwts. of mine for 3 ounces 10 dwts. of retorted gold. They have since given up the block they were working in No 3 level west.—Hamilton and party. This party have 10 inches of stone in their drive at present, but there is only 2 or 3 inches of this worth saving. In their stope the reefs will average 8 or 9 inches of the usual quality crushed by them. Balks and party are now putting through a crushing at the Defiance mill of about 20 tons. They have a nice bunch of stone in their stope at present, in some places 20 inches thick. Balch and party below No. 2 level east. Just now this party have but very little stone showing in the face (about 4 inches), but what there is of it is good, though, as it is so patchy with them, perhaps the next few shots will lay bare another good face of stone. They intend putting through a crushing of about 20 tons next week. Wherry and party have a string reef about 20 inches big in the face at present, they will put through a crushing of about 16 tons next week. Jordan and party in their rise from No. 4 level have altogether about 3 feet of stone, though there is only about 18 inches of this being saved. Stone hauled for the fortnight about 40 tons.—(Signed) John T. L. Williams.

PESTARENA.—November 4: The 46 end east on No. 1 lode has cut into the second stope put up from the 55 fathom level, and is now being stoped forward; it will soon be in the ore shoot. The 55 east on branch of No. 1 lode is carrying a small branch of pyrites on the hanging-wall. The 55 east and 90 west on No. 1 lode are suspended for the present. The 70 crosscut north is again in schist after having passed through an unproductive branch about 20 centimetres wide. In the 90 crosscut south at Acquavita there is no change except that the ground is easier for driving.—Stopes. On Canter lode. One at the 46 east yields 2 tons per fathom at 15 dwts., and another at the 55 east 2 tons at 10 dwts. On No. 1 lode two stopes at the 55 east yield respectively 7 tons at 1 ounce 10 dwts., and 8 tons at 1 ounce 15 dwts. At the 70 east three stopes are producing 5 tons at 2 ounces, 5 tons at 1 ounce 10 dwts., and 4 tons at 2 ounces 10 dwts. per ton respectively. One at the 90 east gives 6 tons at 1 ounce 10 dwts. At the 90 west a stope is yielding 6 tons per fathom at 2 ounces, and one at the 100 west, 3 tons at 10 dwts. —Stabioli. The crosscut west from Morghen adit is at present in a mass of hard schist.—Kirt. The Goja adit south carries less quartz than formerly, otherwise no change has occurred. The end west on Kint lode is somewhat harder, but is mineralised throughout; the lode averages 80 centimetres in width, and its production is calculated at 5 tons of low grade ore per fathom.—Quarazza winze. This has been forked and timbered to the depth of 29·50 metres. The machinery is working satisfactorily.—W. Henwood Trelease, T. H. Mawa.

WESTLEIGH.—Development work at the mine is proceeding fairly well, though the scarcity in native labour is a serious drawback. The west incline is now 204 feet deep, west vertical No. 1 58 feet deep, west vertical No. 2 15 feet deep, east incline 30 feet deep, east vertical No. 1 49½ feet 6 inches deep, east vertical No. 2 28 feet deep, the Venture pit 11 feet deep, east winze 120 feet, east winze (drive east) 21 feet deep, west winze 73 feet. In the east incline the reef is 4 to 5 feet thick, and the bottom 15 inches of this assays over 15 dwts. This is considered encouraging. Our water-right seems to be progressing all right, and has been passed by the local officials. This is the water-right that our manager pegged out.

OURO PRETO.—Passagem mine report for the month of September: Incline shaft No. 1 was sunk 3·60 metres in quartzite, with quartz holding along the roof. 505 end north-east was driven 3·50 metres in schist, carrying lines of quartz and tourmaline. 505 end south-west was driven 2·20 metres. It carries a branch of tourmaline ore against the roof, but the end is chiefly in schist. 470 end north-east was driven 2·90 metres, and continues full size in strong quartz lode. Crosscut at 470 north-east was driven 2·30 metres. The breast is full size in massive quartz, assaying 20 grammes per ton. 435 end south-west was driven 2·40 metres in quartzite, carrying interstratified lines of quartz. 435 end north-east was driven 2·20 metres in schist without ore. End under 435 from No. 2 shaft was driven 1·70 metres. It continues full size in quartz, which is improving in value, the assay showing a yield of 25 grammes per ton. 400 end north-east was driven 4 metres. The ore has dipped under the level, and the end is at present in schist. A crosscut has been started to explore for lower lode, seen at the 355 level. 365 end north-east was driven 3·20 metres. The quartz is increasing in size, and the end is now full size in strong lode, which it is supposed is the beginning of the Buraco Secco shoot. Crosscut at 365 north-east was driven 4·30 metres, and continues in hard quartzite. End under 365 from No. 2 shaft was driven 3 metres. The quartz has risen, and the heading is now in quartzite. A stope has been started to open up the full width of the lode. 365 end south-west was driven 4·80 metres, but continues in schist without ore. Rise over 315 north-east was advanced 3·10 metres in schist, carrying a small branch of ore. 215 end north-east was driven 4·80 metres. It carries a bar of schist against the roof, but the rest of the end continues in strong quartz lode, carrying good patches of pyrites.—Stoping. The stopes at the 435 level continue to be very productive, the lode varying in size from 4 metres thick in the outer stope to 8 metres in the inner stope, and being composed of clean milling ore throughout. At the 400 level the No. 1 stope is in massive quartz 5 metres thick, but the upper stopes carry a good deal of quartzite. South-west at this level the stopes from rise 28 are in strong quartz lode, carrying good patches of pyritic ore. At the 400 north-east of No. 2 shaft the lode in the inner stope continues to increase in size, and is now over 5 metres thick, and there is every indication of a strong body of ore at this point. Over the 365 south-west stoping near the shaft has been resumed. The lode though somewhat mixed with quartzite, carries about 3 metres of ore of good average yield. At the 365 north-east the ore is still of rather low grade, but the lode is holding up regularly, and is improving in value. The stopes in 315 south-west show in places good patches of pyritic and tourmaline ore, but the lode carries a great deal of sterile schist and quarzite. At the 315 north-east the stope on Buraco Secco shoot has gone forward under the level in massive quartz 5 metres thick. There is still ore under foot, and the men have been put to take up this previous to filling and stoping over the level. Under the 265 level a stope on a pillar of lode is yielding a fair amount of ore through the lode; carries a good deal of quartzite. Over this level stoping has been resumed. The lode is about 3 metres thick, and carries good patches of pyritic and tourmaline ore throughout. At the 215 level north-east the inner stope is still in quartzite, with only a small branch of ore against the roof, but the outer stope is in strong quartz lode, nearly 5 metres thick and of good average yield.—(Signed) Henry J. Gifford.

OURO PRETO.—Estimated profit and loss account for three months ended June 30:—Passagem 11,425 tons, 140,528 grammes; Raposos 990 tons, 4166 grammes; equals 12,415 tons, 144,694 grammes, which realised £16,841.

			Contents of 1 ton. Value.	Grmms.
Passagem 11,425 tons 140,428 grms., realis d		£16,346	= £1 8 7	12,300
Total costs in Brasil ...	£11,492			
London expenses ...	500	11,992	= 1 1 0	
Profit...		£4,354	= £0 7 7	
Raposos, 920 tons 4160 grammes, realised		£495	= £0 10 0	
Total costs in Brazil		692	= 0 14 0	
Loss		£197	= £0 4 0	

Summary.—Passagem, profit, £4354; Raposos, loss, £197; profit, three months, ending June, £4157; profit, nine months, ending March, £6147; profit for 12 months, ending June 30, £10,304; add net value of concentrates accumulated during the year, but not yet treated, £860; total profit for the year 1894-5, £11,164. From the above profit must be deducted an amount sufficient to meet the redemption of and interest on the debentures, and the depreciation of the buildings, machinery, plant, &c.

RICHMOND CONSOLIDATED. — Coolgardie property: The manager reports under date October 8 as follows: Crosscut west, 127 feet level, is now in 50 feet. The reef has not yet been cut. The country is good driving, and is schist and decomposed diorite with thin bands of quartz. I have had the cap of the reef, main, exposed by costeening for a distance of about 40 yards at the north end of the lease, and I think this would be a good point to put down an underlie shaft after the main shaft has been put down to water. The reef, where exposed by an open trench, averages 4 feet wide of solid quartz, and contains fine gold throughout the stone.

SOUTHLEIGH MINES.—The following report has been received by last mail from Johannesburg:—No. 1 shaft is down 133 feet and No. 2 shaft 56 feet. Assay samples have been taken as follows:—No. 1 underlay 3 feet wide, 16 dwts. fine gold per ton. No. 2 centre 2 feet 6 inches wide, 3 dwts. fine gold per ton. No. 3 hanging-wall 1 foot 6 inches wide, 12 dwts. fine gold per ton. No. 4 old workings 2 ounces 19 dwts. As regards the sample taken from the old workings, the manager reports that it is expected that the new shaft will intersect them at about the depth of 320 feet.

CUMBERLAND GOLD.—Report for August: No. 5 level north. The crosscut in the footwall was continued for a distance of 24 feet. The country met with for the last 10 feet was pure granite, and being convinced that we had reached the footwall I ceased crosscutting. It is my desire to crosscut in the hanging-wall when the winze from the intermediate level is completed.—No. 4 intermediate level. The leading stope is now carried in 60 feet to the north. The reef averages about 15 inches for a distance of 40 feet, but is pinching out to the north, only about 2 inches of reef showing in the north end. The quality of the ore has proved very disappointing. You will remember that a trial crushing last year, taken out when we first struck the reef, yielded 4 ounces 8½ dwts. to the ton, which point is at the south end of the present stope. Operations to the north, however, now appear to prove that the reef is depreciating in quality, as judging from the stone now being treated at the mill we can only expect from 15 dwts. to an ounce of gold per ton. Another illustration of the patchy character of the Cumberland lode. I intend following up the reef and taking out all the ore met with, with a view to prospecting.—Winze. A party of contractors has just commenced sinking a winze from the intermediate level to No. 5 level north at 39s. per foot.—No. 4 level north. There are no men engaged here at present, but the men stoping above the intermediate level are rising up towards it.—Southern stopes. The contract for raising ore below No. 3 level south at 20s. per ton has terminated. Another contract has been let to raise the ore at 17s. 6d. per ton. The size of the reef is maintained. There are about 50 tons, I think, yet to take out.—No. 6 shaft. During the latter part of the month three men have been working in this shaft. The reef widened out from 4 inches to 8 inches, but during the last few days has narrowed down to 3 or 4 inches. The reef carries good gold. It is my wish to continue sinking.—Ore treated, In August there were 85 tons of ore raised from No. 3 level south, and 62 tons from above the intermediate level north, which yielded 154 ounces 10 dwts. of smelted gold.—Anthony Gallagher.

HANNAN'S REWARD.—The following is an extract from the manager's letter dated October 4: I beg to report the quantity of ore we have now in sight, as follows: Main reef 8000 tons, equal 1 ounce per ton; No. 6 reef 350 tons, equal 7 ounces per ton; No. 2 reef 200 tons, equal 1 ounce per ton; No. 5 reef 190 tons, equal 2 ounces 5 dwts. per ton, and the other reefs passed through in the main drive I think we can safely calculate at 500 tons, going from 2 to 5 ounces gold per ton. As regards the Main reef, when stoping for the mill we may find it give a better yield than that stated above, for in our drives we have passed through some very rich stuff, but as we do not know the extent of the rich stone it will not do to give too high an estimate of the value of the whole. At grass we have 330 tons of stone, equal in value to 1½ ounce of gold per ton. You will have noticed by my reports that we have not been breaking stone from the east and west reefs for some considerable time. The pyrites reef we met with in the main shaft I consider is a splendid sign of the permanency of the Main reef. The treatment of the pyrites will not give much trouble, in fact at the present time with the scarcity of water and consequent difficulty in running a wet process, I would rather prefer a pyrites reef carrying 20 per cent. of pyrites and 2 ounces of gold per ton of pyrites to a reef carrying 2 ounces of fine free gold such as we have in this district. The pyrites could be easily concentrated by the Clarkson-Stanfield process at a small cost, roasted to free it of the sulphur and arsenic and the auriferous iron oxide be sent to the seaport for treatment. It is my intention as soon as we reach 310 feet in the main shaft—at present 261 feet—to start two crosscuts for the Main reef, one at 200 feet, and the other at 300 feet, and I think that as soon as we cut the Main reef in the 300 feet crosscut we shall get a good supply of water, and also I think we shall find that the Main reef perhaps will be smaller, but very much richer in gold than it is at the present level. My theory for thinking so is that as far as I can see most of the east and west reefs we met with in the main drive will intersect the Main reef between the 300 and 200 feet levels, and as they are all carrying gold it looks as if we should have a rich reef.

MOUNT ZEEHAN (Tasmania).—Manager reports for week ended September 27: Silver Queen section, No. 8 lode, main shaft, No. 2 level north extended 7 feet, total 56 feet 6 inches. There are stringers of galena, but not good enough to save for mill. East crosscut extended 6 feet 6 inches, total 48 feet. After intersecting shoot of galena mentioned in the last report we continued the crosscut through a seam of pug 6 inches thick. Shall now drive south, carrying the pug for our hanging-wall and the branch of ore for footwall. Nothing of value in the pug, but a specimen of the galena assayed 71 per cent. lead and 154 ounces silver per ton. Concentrator has been running on ore from Zeehan Montana Company and Tasmanian Crown Company.—Tributes. These are doing fairly well, and the royalties received for the month amount to £327.

MOUNT LYELL.—Mine manager's report for week ending September 25: No. 3 tunnel main crosscut. 2 feet have been driven, making the total length 293 feet. Still in solid pyrites.—South drive, No. 3 tunnel. The face has been driven 5 feet, making the total length 458 feet. Pyrites of fair quality; footwall still making off to the left.—No. 4 tunnel main crosscut. The crosscut has been driven 5 feet, total 102 feet from the footwall of the pyrites. There is no change; face in solid pyrites.—North drive No. 4 tunnel. 6 feet have been driven, total 209 feet. There is no change.—South drive No. 4 tunnel. The face has been driven 6 feet, total length 363 feet. Country schist. Pyrites of fair value. No. 5 tunnel. The tunnel has been driven 6 feet, total length 1108 feet. Driving in solid pyrites.—Progress report for week ending September 27. Smelter building. Carpenters at work on roof-trusses and erecting upper storey of blast furnace department. Pile driving for bin approaches and excavations for foundations of hot blast stoves in progress. Main chimney; haulage of materials by winch resumed. Foundations completed, pedestal now in hand. Sawmill, machine, and carpenter shop running full time. Brick-machine repaired and again at work. Tramline to stone quarry and for fuel supply completed, also saw mill siding. Crusher siding and new kiln siding in progress. Weather, the week began with heavy snowfall, now very fine and dry.

WAIHI SILVERTON EXTENDED. — The local committee, writing under date October 4, state: Battery. Every effort has been made to push on with this work. Our object is to get the battery ready as speedily as possible to enable us to clear the drives of the large amount of quartz already stacked there for crushing. The tramway and water races are all steadily progressing, and will be ready in time for the completion of the battery. Your local directors desire to thank you for so readily agreeing to their wishes in the increase of the crushing plant to 40 heads. We are confident, as we have already stated, that this is a judicious step, and we have very little doubt that but a few months will elapse before you will see the necessity of still further increasing the plant. You will note from the mine manager's report that our progress is rapid, and we anticipate that by the time this reaches you we shall be enabled to cable the completion of the first 20 head.

CRAVEN'S CALEDONIA.—The following fortnightly report has been received from the mine, dated Charters Towers, September 26: In the underhand stope from No. 8 level the reef is about 8 inches thick. The crosscut at the end of No. 8 old level has been extended a further 18 feet, making a total of 41 feet from the level. In the stopes over the crosscut the reef is about 1 foot thick. In the first three stopes over No. 8 hanging wall level the reef is about 8 inches thick, in the next three it is about 6 inches. The crosscut on the fault in No. 7 has been extended a further 20 feet, making it a total distance of 75 feet from the old reef. The ground in this crosscut has been much harder, having passed through a bar of felspar about 9 feet thick. The haulage of quartz for the fortnight is 75 tons, making a total of 253 tons towards the present crushing.—(Signed) Wm. Forbes.

DON PEDRO.—Half-monthly report, dated October 17: Drivage north of winze. From this we have opened a stope which has been carried on in a fair-sized lode, and of moderate quality. This stope is in line with No. 7 stope on this shoot, which, when formerly worked, was considered very poor, but has now improved.—Stope in back of 50 in No. 6 shoot. This has been advanced 41 feet through old-crushed workings, and the yield for this part of the month has been very poor, but to-day we have reached the breast, and back laths have penetrated 4 feet in lode of good quality. I find that the C line of gold is still over our present workings, but by continuing the present stope we shall intersect the line of gold farther east.—70 fathom crosscut. This has been advanced for the month 11 feet, through hard sandstone. Extra water is being cut as the drivage is advanced. The crosscut has commenced to drain the 60 north, and we are now making preparations to start sinking on the line of gold.

LYDENBURG MINING ESTATES.—New Clewer Mine results for September:—From mill. Crushed 1968 tons, yielding 1417 ounces 17 dwts. of gold.—From cyanide works. Treated 826 tons, yielding 805 ounces 7 dwts. of gold; total yield, 2223 ounces 4 dwts. New Clewer Mine results for October:—From mill. Crushed 2040 tons, yielding 991 ounces of gold.—From cyanide works. Crushed 2040 tons, yielding 482 ounces of gold; total yield, 1473 ounces of gold.

SPITZKOP FARM.—Manager's report for week ending Oct. 12: —Reef hill hydraulic, clearing up. In addition to gold gone forward, in hand 270 ounces clean amalgam and 126 ounces rough uncleaned, which will probably represent 270 ounces of melted gold. —Leader hill. Stripping overburden as last reported. Laid down pressure box and pipes from mill race preparatory to stripping by water power. Extending from drives and three crosscuts. Average size of seam and quality of ore same as last reported.—Prospecting drive near mill. The ore was broken down from the face from 15 feet outwards, drive 51 feet long, average thickness of ore 9 and 10 inches. Subsequent assays vary from 3½ dwts. to 13 dwts., assays made on the 16th inst.

LAWLERS.—No. 1 tunnel has been driven 20 feet in the seven days. The face shows considerable quartz, and looks very encouraging. No. 2 tunnel is 145 feet, 18 feet progress last week. The appearance of the drift is most encouraging. No. 3 tunnel is 198 feet, a progress of 14 feet last week; it is looking and panning well. The drift from the bottom of the small shaft of the White Bull was in 32 feet, the bottom of which is in vein matter, which looks very encouraging. There are now on bank some 2000 tons of ore ready for the mill. All the heavy machinery for the mill has arrived, and all is stated to have been shipped from Denver.

WENTWORTH EXTENSION. — Report, dated October 5; Carrol shaft No. 2 sunk 9 feet; total depth, 188 feet.

ANCHOR TIN.—A letter has been received from Mr. M. D. Hratley, one of the local board of advice in Tasmania, confirming his cable of October last: Wash improving. He writes that the alluvial wash in flat is improving, and had not been bottomed yet—an evidence that the wash is very deep. He adds that mining is looking bright in the colony. Mr. Adam Lee, one of the London directors, has arrived at Latrobe, and is proceeding to the mine.

D'ARCY ESTATES.—Report dated October 5:—Main shaft sunk 9 feet during week; total depth, 548 feet.

GELDENHUIS ESTATE.—The directors submit the following summary of operations for September: Quartz mined, 14,329 tons of 2000 lbs.; quartz milled (120 heads), 15,345 tons of 2000 lbs.; yielding smelted gold 5567·75 ounces, valued at £19,085 13s. 8d.; tailings treated 8907 tons, 1668·53 ounces, valued at £4601 8s. 8d.; total, 7236·28 ounces, valued at £23,687 2s. 4d. Cost, £10,287 12s. 7d. Mining and hauling, 7s. 10·43d.; transport, 4·55d.; milling, 2s. 9·94d.; general maintenance, 2s. 4·96d.—13s. 5·88d. Charges, 4·67d.—18s. 10·55d. Expended on mine development, 2s. 8·98d.—£2108 12s. 8d.; cost of treating tailings, 2s. 7·38d.—£1234 7s. 3d.; total, 19s. 2·91d.—£13,630 12s. 6d.; profit for the month, £10,056 9s. 10d.—Capital account. Expended on machinery, new shafts, &c., £3091 7s. 10d.; number of feet driven and sunk during month 649½ feet; the ore developed for the month amounted to 14,189 tons.

HARQUAHALA.—Copy of mine reports for the month of September: Cyanide plant. This has been run steadily during the month, and operations have progressed very smoothly. The wire tramway is handling the pulp easily and very satisfactorily. The lumps of slimes and layers of these in the beds give some trouble, but arrangements are being completed to make the treatment of these more satisfactory. During the month the storage water tanks have been moved from the stamp mill to a considerable elevation above the cyanide plant, and a good pressure and supply thus secured for sluicing the pulp from the vats after treatment. The mine water is also pumped to these tanks and used for sluicing. Two men on the night shift sluice out the residues very readily. Sluice boxes from the vats were put in, and a canvas roof put over the ore vats, which keeps them in better condition. The precipitation in the zinc boxes has been very satisfactory. They have been rather crowded, and the box intended for the waste solutions had to be used for the stock solutions. Another box will be put in at once, and the low solutions running to waste will first be passed through this. The amount treated and the returns are as follows:—Pulp treated 3973 tons, assay value of pulp $4·10 per ton, assay value of residue $0·78 per ton, percentage extracted according to assays 81, percentage extracted according to bullion 76, gold precipitated $12,000, cost of treatment $5100, extraneous expenses $1100; total cost $6200; profit $5800. Miscellaneous revenue $300, net profit for the month (at $4·90 to the £ sterling £1245), $6100. The weather continues very fine, which, of course, is greatly to advantage in our present operations. The machinery standing idle is being kept in good condition.—Robert M. Raymond, manager.

MATA BELELAND DEVELOPMENT.—Report dated October 14; Matabeleland area. Pick-me-up (previously called Impemesa extension). A large old working about 200 feet in length and 8 feet in width. Shaft sunk 16 feet.—American reef. Old working some visible gold found on surface, but not very promising. Shaft sunk 24 feet; few stringers of quartz appear at bottom of shaft.—Ivanhoe reef. Shaft No. 1 down 50 feet, and crosscut to reef 23 feet; drive made along reef 37 feet: sample panning fairly well. South drive 14 feet in banded chert, panning a little gold. Shaft No. 2 sunk 51 feet, and crosscut driven each way, panning showing about 6 dwts. Shaft No. 3 down 46 feet. Reef 7 feet wide, showing quartz with much oxide of iron, work discontinued for the present. Red stone in surface trenching carries very good gold, some of it panning 2 ounces.—Ivan reef. Shaft sunk 25 feet. Expect to cut reef in a few feet, old workings about 10 feet deep; sample from bottom of shaft pans a good colour.—Monte Christo. Shaft down 40 feet; crosscut at that depth runs through about 4 feet of vein matter, panning little gold. Contracts given for sinking shafts on Rich hill and Arundel old workings.—Mashonaland area. Royal reef. Shaft down 25 feet. Old workings 10 feet deep, trench started in which reef 5 inches wide, was found giving colour in the pan. Koodoo shaft is 30½ feet, sinking discontinued at present. Green shaft sunk 29 feet, reef nearly to bottom of shaft and well defined. Pink shaft No. 2 down 31 feet, with no fresh results. Shaft No. 3 total depth 29 feet.

ELMSLIE.—The London manager reports: Referring to the recent circular letter to shareholders a cablegram received from the head office shows that one of the mining properties lately acquired has paid a dividend to this company of over 17 per cent. per annum on the amount expended upon it. Within very little of the whole of the purchase price and expenses has now been returned. Prices keep firm at ¼ to 1.

LADY ISABELLE.—The weekly report issued from the London office reads:—Reef in stopes averages 1½ feet, and the stope is of very good quality, raised 130 tons. Last crushing 205 tons for 270 ounces of gold. Advices of another return now expected. The continuous favourable news is having effect upon the market, prices being par for the 4s. paid shares.

LEADHILLS.—W. H. Paull, November 11: Brown's vein. The 160 fathom level north of Jeffrey's shaft is going forward at a fair rate on vein 2½ feet wide, chiefly composed of kindly spar, but contains no ore at present. In stope over this level south of Jeffrey's shaft, the vein is worth 25 cwts. of ore per fathom. Nothing of importance having been met with in crosscutting westward at the 160 fathom level south of Wilson's shaft, we have suspended same, and driving has been resumed on vein 4 feet wide, showing a little spar, but rather dried in character. In stope above drift over 160 south of Wilson's shaft, the vein is producing 80 cwts. of ore per fathom. The vein in drift over the 160 fathom level north of Wilson's shaft is producing 50 cwts. of lead ore per fathom. No. 4 stope over the 145 fathom level north of Jeffrey's shaft will produce 35 cwts. of ore per fathom. Nos. 1 and 2 stopes above the 115 fathom level north of Jeffrey's shaft are worth respectively 20 and 40 cwts. of ore per fathom. The vein in the 100 fathom level driving south of Wilson's shaft is opening out wider, now 5 feet wide, composed of a kindly stone and mixture of spar and forebreast damp. The several stopes over this and higher levels on Brown's vein continue to produce about their usual quantities of ore. Raik and Highwork veins. The crosscut eastwards at the 100 fathoms level is being continued in congenial ground, and occasionally small stringe of spar are met with. In the 100 going south of this crosscut Raik vein is composed of a strong mixture of spar and stone spotted with lead ore and end wet. The same level is being continued north-west of crosscut on a portion of the vein which yields 30 cwt. of ore per fathom, and looks likely to improve. No change of note elsewhere.

MAY CONSOLIDATED.—The directors submit the following report for the month of September: Battery. 80 stamps ran 29½ days crushed 10,750 tons. Gold won 3629·35 ounces (average 6·752 dwts. per ton), valued at 72s. 6d. per ounce, £13,156 7s. 10d.—Cyanide works: McArthur-Forrest process. 5795 tons tailings treated. Bullion won 1002 ounces (average 2·593 dwts. fine gold per ton), valued at 60s. per ounce, £3006.—Siemen's process. 5800 tons tailings treated. Bullion won 1401 ounces, equal to (say) 1050·75 ounces fine gold (average 3·623 dwts. fine gold per ton), at 80s. per ounce, £4203. Other receipts £67 10s.; total £20,432 16s. 10d.—Working costs. Mining 10,750 tons cost £6784 4s. 1d.=12s. 7·461d. per ton; development 10,750 tons cost £1824 11s. 6d.=3s. 4·735d. per ton—£8608 15s. 7d.=16s. 0·196d. per ton. Tramming 10,750 tons cost £338 2s. 1d.=7·548d. per ton; crushing and sorting 10,750 tons cost £243 3s.=5·428d. per ton; milling 10,750 tons cost £2055 2s. 3d.=3s. 9·882d. per ton—£11,245 2s. 11d.=20s. 11·054d. per ton.—Tailings treatment. McArthur-Forrest process 5795 tons cost £1574 15s. 1d.=5s. 5·218d. per ton; Siemens process 5800 tons cost £921 18s. 4d.=3s. 2·149d.; total, £13,741 16s. 4d.; profit, £6691 1s. 6d.—Expenditure on capital account. Construction, &c., £11,250 10s. 9d.; excess development £835 7s.; total £12,085 17s. 9d.

THE INSTITUTION OF CIVIL ENGINEERS.

THE first meeting of the Session 1895-96 was held on Tuesday last, when a portion of the new building, comprising the theatre and approaches, with tea-room, &c., was made available for the purposes of the evening. The chair was taken by Sir BENJAMIN BAKER, K.C.M.G., LL.D., F.R.S., the new President, who delivered his inaugural address. After some preliminary observations referring to the position of the institution in the domain of engineering, and the necessity of British engineers acting together in a true spirit of comradeship throughout the world, the President proceeded to discuss the question why engineering, unlike other liberal arts, was an essentially modern profession. Was it because the modern demand for rapid transit, often as purposeless as that of a record-breaking bicyclist, had not its equivalent in the past, or was it because our ancestors lacked the inventive power and mechanical ingenuity of the present age? The artificers who built the highly ornamental barge in which Columbus blundered across the Atlantic could, with the same materials and workmanship, have constructed a clipper ship capable of sailing 300 miles in a day, but no one asked for speed in those days. On the other hand, although the present was pre-eminently an age of invention, an impartial survey of actions and events recorded in history would satisfy most people that in all ages there were to be found men no less intellectual and enterprising than ourselves. The general answer to the question raised would probably be that as it was only in the present century that people had insisted upon rapid locomotion by land and water, so it was the necessity of meeting that demand which had created the profession of modern engineering. When Watt directed his attention to the steam-engine the country was weary of wars, and longed for the advancement of its material prosperity, and so a demand was created, and the country quickly became covered with canals, roads, and factories. At that time England depended largely upon her American colonies (now the United States) for the supply of iron, and in 1751 an Act was passed admitting American bar iron duty free to London, but prohibiting its cartage therefrom to Birmingham, as it was desired to make London, instead of Birmingham, the chief seat of the iron manufacture of the country. No one foresaw that Great Britain was to become the leading iron-producing country of the world. On all subjects, indeed, the most eminent men constantly failed in their forecasts. Smeaton did not believe in the steam engine as proposed by Watt; Telford had grave doubts as to the practicability or usefulness of the Liverpool and Manchester Railway; Sir Robert Peel, sixty years ago, blocked a proposal in Parliament to make all the railways seeking access to London adopt a comprehensive plan for a central exchange station, so that through passengers and mails might be saved cabbing across London; Lord Brougham tried, in 1857, to make 30 miles an hour the statutory limit of speed on railways; Lord Palmerston told the House of Commons that the Suez Canal was one of those bubble schemes often set on foot to rob the English capitalist, and even Robert Stephenson, following him, declared it to be, commercially speaking, impracticable. All these mistakes, however, became insignificant when contrasted with the gigantic blunder, acquiesced in by the whole civilised world, of assuming, at the time of the Great Exhibition of 1851, that the efforts of the engineer would effect an immediate change in the long inherent savagery of mankind, thereby inaugurating a period of universal brotherhood and peace. Civil engineers were often reproached for devoting their ingenuity to the devising of man-killing appliances, but with little reason, for no one could fail to see that whatever might be abstract principles of Christianity, in practical politics they were disregarded, it being always taken for granted that if a nation possessed that which another nation might covet, it must be prepared to defend its possession at the point of the sword.

It had been frequently assumed that everyone acknowledged the benefits conferred upon humanity by engineers in facilitating communication, cheapening production, and raising the condition of the toiler; but the late Professor Froude has publicly stated that he failed to see much evidence of progress in the nature of men, and that "Even in the outward essentials of food and clothing and housing it is not certain that the mass of mankind in the present generation are better off than their forefathers." The President was not prepared to accept this dictum, and maintained, on the contrary, that the mass of mankind were much better off than their forefathers in these respects. Further, that the independence of the labourer and mechanic had been greatly advanced in consequence of the vastly increased demand upon their services due to engineering work. In support of this view it was stated that as recently as four years after the opening of the Liverpool and Manchester Railway, certain Dorsetshire labourers ventured to erect themselves into an elementary form of trade union, and were sentenced to seven years' penal servitude for their pains. At the present time many municipal contracts provided for payment of wages at trade union rates, whereas a couple of centuries ago the magistrates fixed the rate at Quarter Sessions, according to the price of food and clothing, the average being about 1s. a day for carpenters and masons, and 8d. for labourers. The hours of labour for all classes were from 5 a.m. till 8 p.m., with 2½ hours interval for meals and rest. The penalty for an employer who departed from these regulations was 10 days' imprisoment and £5 fine, and for a workman 21 days' imprisonment. No man in search of work could beg without a licence, the statutory penalty for a first offence being whipping at a cart's tail, while the second offence meant the loss of an ear and two day's scourging, and the third hanging. On the whole, the study of the past was conclusive as to the material and moral progress which had accompanied the development of engineering works.

The President next dwelt upon the work done by physicists in the borderland of engineering, and expressed the opinion that long before the coal fields were exhausted some way would have been discovered of tapping the inconceivably great reservoirs of force in Nature still untouched. Although no one could foresee the demands of the next age, new wants constantly arose, and new branches of engineering often resulted from apparently trivial laboratory experiments.

In conclusion, the President sounded a note of warning against the growing disposition to over-rate technical education. Education would do much, but it would not endow a man with common sense, nor would it make his opinion on a multitude of important subjects worth more than that of any naturally observant person. There were not wanting contractors and manufacturers who contended that some of the highly-trained young engineers of the present day were not wholly free from a tendency to over much reliance on formulas, without due regard to the sufficiency of the data upon which such formulas were based. Such faults were best remedied by joining in practical discussions with other engineers, such as it was a province of the Institution of Civil Engineers to encourage.

After the delivery of the address the President presented to the recipients or their representatives the medals and premiums awarded for papers read last session, or printed in Section II. of the minutes of proceedings.

PROVINCIAL SHARE MARKETS.

THE CORNISH MINE SHARE MARKET.

MR. SAMUEL JOHN DAVEY, Dealer in Cornish Mine Shares, Redruth, Cornwall, reports under date of November 14, (4 o'clock) as follows:—We have had a very quiet market this week, with but little alteration in prices. There is practically nothing doing to-day. Following are quotations:—Blue Hills, 1s. to 2s.; Carn Brea, ¾ to 1½; Dolcoath, 18s. to 19s.; Dolcoath (partly paid), 6s. to 7s.; East Pool, 3½ to 4; Killifreth, 7s. to 9s.; South Crofty, ¼ to ½; South Wheal Frances, ¾ to 1; Tincroft, 3¾ to 3¾; West Frances, ¾ to 1; West Kitty, 4 to 4½; Wheal Basset, 3½ to 4; Wheal Grenville, 12½ to 13; Wheal Kitty (St. Agnes), ¼ to ⅜.

Mr. MICHAEL WILLIAMS BAWDEN, Mining and Assaying Offices, Liskeard, Cornwall, writes (November 14) as follows:—The mining market continues quiet and devoid of any inquiry for shares. Prices lower in sympathy with the decline on other stocks; business confined to settlement. Quotations:—Blue Hills, 1s. 6d. to 2s.; Carn Brea, 1⅝ to 1¾; Devon Consols, 29s. to 30s.; Dolcoath (fully paid), 18s. to 19s.; ditto (partly paid), 6s. to 6s. 6d.; Drakewalls, 1s. 9d. to 2s.; East Pool, 3½ to 3¾; Killifreth, 8s. to 9s.; Levant, 4½ to 4¾; Polberro, 15s. to 16s.; South Crofty, 7s. to 8s.; South Frances, 1 to 1⅛; Tincroft United, 3½ to 3¾; West Frances, 12s. to 14s.; West Kitty, 3¾ to 4; Wheal Basset, 3½ to 3¾; Wheal Friendly, c.p., 3s. to 6s.; Wheal Grenville, x.d., 12½ to 12¾; Wheal Kitty, c.p., 6s. to 7s.; Wheal Metal, 5s. paid, 5s. to 6s.

Messrs. ABBOTT AND WICKETT, Stock and Share Brokers and Mining Share Dealers, Redruth, write under date of November 14:—The past week has been a very quiet one in the Cornish Share Market, and the amount of business has been small. With the slight improvement in tin, however, the tone at the close is somewhat firmer. Quotations herewith:—Blue Hills, 1s. to 3s.; Carn Brea, 1 to 1¼; Dolcoath (fully-paid), 18s. to 19s.; ditto (5s. paid), 6s. to 7s.; East Pool, 3½ to 4; Killifreth, 6s. to 8s.; Polberro, ½ to ¾; South Crofty, ¼ to ½; South Frances, ¾ to 1; Tincroft, 3½ to 3¾; West Frances, ½ to ¾; West Kitty, 4 to 4¼; Wheal Basset, 3½ to 4; Wheal Grenville, 12¾ to 13; Wheal Kitty, ½ to ¾; Wheal Metal (3s. paid), 3s. 6d. to 4s. Tin, 65¾.

MANCHESTER.

Messrs. JOSEPH R. and W. P. BAINES, Stock and Share Brokers, Queen's Chambers, 7, Market street, write, November 14 (noon):—The past week has furnished about the most doleful period for months past, Saturday last being about the culminating point. On that day (Saturday) everything seemed just about "going to the dogs." The day finished with the lowest prices seen for a long time, and the lowest of the day, except for a few mining shares and land companies' shares, wherein probably the position therein was more accountable than actual strength otherwise. The whole market seemed overburdened with a superincumbent weight impossible to withstand, for it was feared that the Lord Mayor's banquet would produce some alarmist utterances. On Monday the Premier's speech was before the public, and, instead of setting up fresh alarm, it was read as very favourable to the "European Concert," as it used to be described. This quite tamed the whole market around, and buyers instead of sellers came into prominence all round the markets. The consequence is that although on Saturday some very much lower prices were marked than those we wrote upon last Thursday, the changes on the week are now (as regards rails), with few exceptions, on the upward side. In home rails, Scotch stocks have had a prominent advance on prospects of termination of the "sympathetic lock-out." They, however, do not quite maintain best prices of the week so far as Caledonian deferred and British ordinary are concerned. In Americans some pretty wide fluctuations are to be noted. Louisvilles, for instance, after going down to very little over 52 on Saturday, have rallied sharply, and now quote actually a small advance on the week. Denver issues have moved pretty similarly, as also have Milwaukees. In Canadians, Pacifics have oscillated in wide figures, and are still down on the week. Trunk issues only fractionally altered on balance. Turning to markets other than rails, Consols, after being distinctly lower, have recovered, and finish only ¼ lower where altered. Colonial stocks, home corporation stocks, and foreigners are lower, the first and the last-named showing some distinct depreciations, and the most distinct being in foreigners. With here and there a contradiction of a favourable character, the majority of changes in the several sections of miscellaneous prices, as will be seen by the details printed below:—

CONSOLS.—Lower: 2⅞ per cent., to ⅛.

COLONIAL STOCKS, &c.—Lower: Cape of Good Hope Registered, 1; ditto Inscribed, ⅛; Natal Inscribed, 2; New South Wales Inscribed, 1; New Zealand Inscribed, 1; Victoria Inscribed, 1.

CORPORATION STOCKS AND DEBENTURES.—Lower: Birmingham Three and a-Half per Cent., ⅛; Liverpool Three and a-Half per Cent., ⅛.

FOREIGNERS.—Lower: Argentine Six per Cent., 2 to 2¼; ditto Five per Cent., 3; Brazilian Four and a Half per Cent., 3; ditto Four per Cent., 1¾; Egypt Unified, ⅜; Italian Rentes, 1⅛; Mexican Six per Cent., 2½; Portuguese Three per Cent., 1; Spanish, 1¼; Turks, Group D, 2¼.

BANKS.—Lower: Imperial Ottoman, 1½; Manchester and Liverpool District, ⅛ to ¼; Oldham Joint Stock, ⅛; Parr's Banking, ⅛ to 1.

INSURANCE.—Higher: British Law Fire, ⅛.—Lower: Commercial Union, ⅛; Lancashire, 1-16; Liverpool, London, and Globe, ⅛; London and Lancashire, ⅛ to ⅜; Maritime, 1-16; Royal, ⅛; Thames and Mersey, ⅛.

COAL, IRON, &c.—Higher: Bolckow Vaughan (£12 paid), 1-16 to ⅛.—Lower; Bolckow Vaughan (fully paid), ⅜; John Brown, ⅛; Dorman Long, ⅛.

TELEGRAPHS AND TELEPHONES.—Lower: Anglo-American Deferred, ⅛; ditto Preference, 1; Eastern Extension, ⅛; Telegraph Construction, 2; Western and Brazilian, ⅛.

BREWERIES.—Higher: Farnham United, ⅛.—Lower: Allsopp, ⅛ to 1¼; Guinness, 5.

MISCELLANEOUS.—Higher: Crosses and Winkworth, 1-16 to 3-16; Hetheringtons, 1-16 to 3-16; Liverpool United Trams, ⅛; Patent Nut and Bolt, ⅛; Gas Light A, 1 to 2.—Lower: Tower Ordinary, 6d. to 1s.; Brunner Mond, ⅛; Bryant and May, ⅛; Chadwicks Ordinary, ⅛; Coats' Ordinary, ⅜ to 1⅛; Cunard Steam, ⅛; Eastman's, ⅛; Henry's Ordinary, ⅛; Howard and Bullough, ⅛; Pacific Steam, ⅛; Salt Union, 1-16; United Alkali, ⅛; Sir J. Whitworth, ⅛.

LATER (4 p.m.)—As a rule prices have maintained, or improved upon, full late levels to-day, though not without exceptions. The market has observed a waiting attitude to-day to see the result of the settlement, but it is reasonable to note that this "waiting attitude" has not been accompanied by pressure of sales as has been the case for some few recent past accounts.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, Stockbroker and Ironbroker (November 14), writes:—During the past week the market has been influenced by liquidation sales, which, at one time, declined into an indiscriminate selling by panic-stricken holders. Just at the worst Lord Salisbury's reassuring speech at the Mansion House on the political situation, came to the rescue. The issue of good Board of Trade Returns has also helped the recovery.

In shares of coal, iron, and steel companies, the principal dealings have been in Steel Company of Scotland shares, which have recovered to 75s. on prospects of the strike in the Clyde being arranged. The dividend of the Cairntable Gas Coal is announced at 7½ per cent.

African Coal are at 4s. 6d., Calderbank Steel 10s., Fifeshire Main Ordinary 12s. 6d., Marbella 50s. and Niddries 42s. 3d.

In shares of copper concerns a fair amount of business has been done. Arizona declined to 45s. 3d., Tinto to 15, and Tharsis to 9s. 6d., but are now all better; Central Chili 7s. 6d. to 8s. 6d.

In shares of gold and silver mines a large amount of business has been done. Owing to liquidation sales Chartered fell to 93s. 9d., Consolidated 14, East Rand 5½, Johnnies 67s. 6d., Randfontein 63s. 6d., Sheba 27s., but are now all much better. The fall has not been owing to anything going wrong at the mines. On the contrary, they are in many cases increasing their output. The fall was simply due to parties reducing or closing accounts, and if these sales are pretty well ended, which seems probable, the recovery may go on. Before lower on proposed reconstruction. British Broken Hill higher on anticipated better results from sulphides. Afrikander are 3 7s. 6d.; African Land, 3s. 9d.; African Recovery, 33s. 6d.; Anglo-French Investment, 90s.; Balkis Land, 8s. 3d.; Bechuanaland, 40s.; Big Golden Quarry, 1s. 6d.; Black Flag, 27s. 6d.; Central Exploration of West Australia, 31s. 3d.; Comet, 60s.; Craven's Consolidals, 3s.; Charterland, 18s. 9d.; Eastleigh Deep, 15s.; Great Orion, 12s.; Golden Crown, 30s.; Guy Fawkes, 2s. 6d.; Gold Fields of Mysore, 19s.; Holcomb, 1s. 6d.; Imperial Corporation of Western Australia, 2s. 6d. prem.; Lisbon, Murchison New Chum, 22s. 6d.; Mawson's Reward, 17s.; Menzies Gold Reef, 40s.; Mysore Wynaad, 20s.; Massi Kessi, 9s. 6d.; Nigel Deep, 60s.; New Louis d'Or, 3s.; Oceana, 40s.; Orion Belt, 6s. 6d.; Paddington Consols, 25s.; Paarl Central, 28s. 9d.; Royal Charter, 27s. 6d.; Rothery Block, 17s. 6d.; Spes Bona, 33s. 9d.; Sheba Queens, 3s.; Tati Concession, 42s. 6d.; Violet, 16s. 3d.; Vogelstruis, 7s. 6d.; West Australian Share Corporation, 12s. 6d. prem.; Wealth of Nations, 10s. prem.; Wemmer, 10½; and Willoughbys, 41s. 3d.

In shares of local and miscellaneous companies prices are steady. Oil companies shares continue to improve on better advices from America. Broxburn are at 13½, Pumpherston 9¾, and Young's 10s. 6d. (touched 44s.). The dividend on Aberfoyle Slate Quarry is announced at 7 per cent. Nobel's are at 15½.

EDINBURGH.

Messrs. THOMAS MILLER and SONS, Stock and Share Brokers, 60, Hanover-street, Edinburgh, report as follows under date of November 14:—There has been an improvement in prices since last week's report, due to the subsidence of the panicky feeling. The stocks of the two leading Scottish railway companies have also been favourably affected by the more hopeful views now entertained as to the settlement of the labour dispute on the Clyde. Caledonian Preferred has advanced from 48 15-16 to 50½, North British from 39 11-16 to 40, ditto Ordinary Preference from 80½ to 80⅝. In Insurance shares, Alliance, Liverpool, London, and Globe, Northern, and North British and Mecantile are lower. Scottish Union A have declined from 89s. 3d. to 88s. Caledonian have risen from 27½ to 28. Commercial Union from 36½ to 36¾. In Banks, Bank of Scotland has risen from 336 to 337, Royal from 220 to 222½, Union from 20 to 20¼. Arniston Coal shares have fallen from 25⅞ to 23¾, Niddrie from 44s. to 42s. 6d. Tharsis Sulphur and Copper rose from 9s. 3d. to 9s. 3d. Broken Hill declined from 43s. to 41s. Steel Company of Scotland shares have risen from 67s. to 76s., Arizona Copper from 45s. 3d. to 51s. 6d., Pumpherston Oil from 9⅜ to 9¾, Youngs's from 48s. to 49s. 3d.

INDIAN MINES OUTPUT FOR OCTOBER.

DURING last month the output of the producing mines in Mysore, India, was 22,301 ounces, showing an *increase* of 799 ounces as compared with the preceding month, and an increase of 3182 ounces as compared with the corresponding month of 1894. The production since the beginning of 1891 has been as follows:—

	1891. Ozs.	1892. Ozs.	1893. Ozs.	1894. Ozs.	1895. Ozs.
January ...	10,186 ...	11,674 ...	16,844 ...	17,026 ...	19,672
February...	10,121 ...	11,780 ...	16,656 ...	15,803 ...	19,358
March	10,117 ...	11,579 ...	17,463 ...	16,080 ...	20,257
April	9,392 ...	11,813 ...	18,287 ...	15,551 ...	20,399
May	10,509 ...	12,488 ...	17,922 ...	16,543 ...	20,797
June	10,746 ...	11,847 ...	16,879 ...	15,459 ...	20,839
July	11,097 ...	13,277 ...	16,676 ...	18,271 ...	19,280
August.....	11,222 ...	14,854 ...	16,692 ...	19,073 ...	20,704
September	11,396 ...	15,529 ...	17,060 ...	18,911 ...	21,502
October ...	12,095 ...	15,922 ...	17,440 ...	19,119 ...	22,301
November	11,667 ...	15,942 ...	17,557 ...	18,825 ...	—
December	11,589 ...	16,435 ...	17,659 ...	19,068 ...	—
Total ...	130,137 ...	163,140 ...	207,135 ...	209,729 ...	204,446

The outputs of the individual mines for the past six months have been:—

	May. Ozs.	June. Ozs.	July. Ozs.	Aug. Ozs.	Sept. Ozs.	Oct. Ozs.
Champion	6,046 ...	6,012 ...	6,039 ...	6,052 ...	6,028 ...	6,036
Mysore	5,453 ...	5,056 ...	3,626 ...	4,844 ...	5,563 ...	5,699
Champion Reef	5,651 ...	5,910 ...	6,008 ...	6,068 ...	6,101 ..	6,204
Nundydroog...	3,178 ...	3,201 ...	3,236 ...	3,267 ...	3,286 ...	3,295
Mysore Reefs.....	205 ...	133 ...	71 ...	64 ...	— ...	—
Mysore Reefs	— ...	236 ...	— ...	305 ...	100 ...	116
Mysore W. and Wynaad ...	264 ...	— ...	— ...	— ...	424 ..	951
Ooregaum ...	— ...	291 ...	306 ...	104 ...	— ...	—

A RUBY FIELD IN BURMA.—The Government notify that the Mogaung stone track, situated to the north of Mogaung, in the Myitkina district, Burma, which is said to contain rubies and other precious stones, will be thrown open to the public from November 1.

MINING IN CORNWALL AND DEVON:

NOTES ON MINING IN THE WEST.

(FROM OUR SPECIAL CORRESPONDENT.)

THE "slump" which has taken place on the Stock Exchange has not been without its effect in Cornwall. It has arrested one or two important movements, and has, to some extent, thrown back the market to very nearly the level of a few weeks ago. It may not be of much consequence, and we do not believe it is, because Cornish mines are coming to the front, and the feeling which has been prevalent here, and which is based on some substantial foundation, that an improvement in prices, if not imminent, cannot be long delayed, is as pronounced as ever. It is, however, scarcely to be expected that people will go on speculating in the face of such depressing circumstances as have exhibited themselves in London during the past week or ten days. It is unfortunate, especially for Dolcoath. After the meeting there were some good buying orders on the market, and the sensitiveness of the shares was quickly shown by their immediate and substantial increase in market value. With the altered circumstances in London the demand slackened off, and the prices followed suit, with the result that much of the headway which was then made has been lost. A good number of shares have been picked up cheap, and, in the opinion of most people, it is only a question of holding to realise substantial profits. This is evidently the opinion of most of the Cornish holders, who are *bona fide* mining adventurers, and who know the value of the mine, and of the desirability of the improvements which are being affected there. The work at the new shaft is going on well, and the men engaged in it are down out of sight. It is still in "pot" granite, and the timbering which this necessitates prevents a continual sinking, but the delay thus caused is more than compensated for by the speed with which the sinking can be effected.

TINCROFT shares have suffered somewhat since the meeting, but this was bound to be the case on the announcement which was made as to the proposed outlay, not because of any doubt as to the expediency of the expenditure, but because of the unexpected call. The determination to carry out the new work means that Tincroft is in for a quiet time until towards its completion, unless, of course, there is a big rise in tin; but the keener speculators are likely to pick up Tincrofts in anticipation of the rise which is then bound to take place. When the shaft is cut down for this extra 70 fathoms, the new gear put in, and everything ready for working, Captain Teague has promised an extra 12 tons of tin a week, and he will probably be able easily to fulfil his promise. The Cook's Kitchen part of the sett will then be developed thoroughly, as it deserves to be, and it will be more than surprising if the old Cook's Kitchen shareholders do not yet regret having neglected their opportunity of finding the money to put the mine in order themselves.

EAST POOL meeting, on Monday, is being looked forward to with some amount of interest, not because anybody expects that the committee will by that time have find any solution of their trouble with their neighbours at Wheal Agar. It is too much to expect that — except, perhaps, by that last resource, the erection of their own engine. They may recommend that course to be adopted, but although that may appear to be one way out of the difficulty, the shareholders will probably be shy of rushing into an expenditure of £10,000 or £12,000 when the district is already supplied with power sufficient to meet its pumping requirements. It is all the more unfortunate that the water trouble should be so pressing when East Pool is doing so well. The returns of tin have increased, the mine is looking better than for some time, and the accounts must show a considerable profit. If the new engine scheme is persisted in this money will, of course, have to be applied to this purpose. We hope, whatever happens, that the shareholders will not miss another opportunity of strengthening their committee.

THE capital for the British and Colonial Explosives Company, whose factory is situated at Perranporth, was so largely contributed in Cornwall that the announcement of a settlement has been received with great satisfaction. Nobel's last week paid down the £360,000 and interest which they agreed upon as the purchase money for the works, but there was a hitch in the settlement a week or two ago in consequence of some dispute as to the ownership of the mineral royalties. So serious, indeed, had it become that writs had been served by Nobels, but these have now, of course, been withdrawn and a compromise effected. The shareholders will receive 16s. in the course of a few weeks with the prospect of a further small amount in a little time. There has been only 17s. 6d. called up, so that probably the shareholders will receive back about the amount that they have paid up. They are to be congratulated on getting off so well, and the money will be handy for buying up mining stock in anticipation of the rise.

MR. J. B. REYNOLDS, in his opening address at the West Kitty meeting on Wednesday last, and the speakers who followed him during the subsequent proceedings, were as one as to the company's satisfactory position in regard to the two great essentials for successful working. West Kitty, in common with all Cornish mine companies depends for its ultimate prosperity upon two factors—on he part of the mine a good state of development, and in regard to the disposal of its product, a firm and healthy condition of the metal market. Mr. Reynolds and other gentlemen, who by their official connection with the company, are qualified to give a conclusive opinion upon such matters, were well able to assure the shareholders as to the company's position in both these regards. As to its workings, especially the utterances given by the head of the management at the mine, no less than the Chairman's careful and detailed statement, show that the mine is looking—we believe that is the phrase—extremely well. As to the future history of the tin market, no absolutely certain forecast can be made, but while in matters of detail there are a good many differences, there is no doubt a generally hopeful opinion as to this highly important feature in the mining industry. With a good opening-up in the mine and a fair price ruling in the markets, West Kitty should do well.

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PAPER ON THE CUPREOUS PYRITES DEPOSITS OF ANDALUCIA AND ALGARVE.

RETROSPECTIVE AND PROSPECTIVE.

Extracts and Notes from Mining Operations and Reports on these during the past 25 years.

By WILLIAM GUTHRIE BOWIE.

(*Continued from page* 1376.)

REGARDING the hypogene rocks and their relations with the masses of ore, the following will help to show their position:—The mines having these near to or in contact with their north boundary, which side is, as stated, the upper side, or hanging wall of these masses, are Pena de Hierro, Chaparrita, San Miguel (which in this mine tilt the mass south, and hence here on foot-wall), Cueva de la Mora, Joya, Pedrosa, and California, Burtron, Castillo de la Guardas, in which mine they also cut across the mass. The mines having these rocks on their south boundary, and which is the footwall of these masses, are Poderosa of Zalamea, San Telmo, Vuelta Falsa, while the masses of Rio Tinto are apparently lifted bodily and divided by the hypogene rocks, and Lapilla partly so, and the west extremity of Lagunazo somewhat remotely affected, while the remaining numerous and important mines as Tharsis groups, Zarza, Sotiel Coronada, Confessionarios, Carpio, Lagunazo, Cabezas del Pasto, &c., &c., are entirely free from hypogene rocks and lying conformably in their stratas of sedimentary rocks. All the mines, whether with or without hypogene rocks, have metamorphic schists, especially in the case of the latter, when these are near at hand, and all have cupreous schists, and some native copper. Probably this last is precipated by organic matter from the solutions of sulphates, during or after precipitation of these masses, while the alternate layers of cupreous schist are matters of great importance to fix the origin of the masses from sources containing elements of copper, &c, in the rocks that were denudated to form them, while the different hypogene rocks cropping up so abundantly, have no copper, or such elements as are found in these sedimentary cupreous schists, or the cupreous pyrites, and could not have brought with them these elements composing the cupreous schists and pyrites, while the diminishing form of all in depth is proper to sedimentation, whether on a slope or in a basin, or hollow, and known as thinning out of beds, and common to deposits even if purely lacustrine, even there is a marked resemblance observable in the shape of these masses to what deposits are that are formed in basins, pools, or hollows, having circular or elliptic forms in their perimeters, for where best preserved from denudation, or not accidentally broken in two when elevated from their horizontal or inclined position, they are evidently convex on the under or footwall and flat on the upper face or hanging-wall, while their greatest length and form of the extremities in this direction, and that in depth they eventually assume an appearance as if their greatest lengths were the transverse axis of an ellipse, or some such irregular circular and elliptic forms of pools or hollows, and that of their depth the conjugate diameter of the same. In the cases of being well preserved from denudation, as intimated above, they begin at the surface as narrower and shorter, and increase in width and length as depth is attained, until the maximum of each is reached, and from here diminish in the same way as they increased, while the layers of schist also carrying much copper, formerly mentioned, follow the same rule, with the exception that the uppermost of these or hanging-wall of the cupreous pyrites masses often pass on from one mass to another, in continued strata more or less pinched in the parts joining these masses as if representing the first layers of sediment, that after the hollows referred to were filled, spread over the dividing hillocks or mounds, and formed flat tracts upon these filled in hollows with the pyritic materials. There are also instances under the same circumstances where the length becomes less than the depth, that is, the horizontal axis becomes the conjugate, while the perpendicular becomes the transverse axis, while again there are others with their measurements in these directions so equal as to appear to have circular perimeters. While if we could add to all that part which denudation has swept away, they would be found to have forms like segments cut from solids having spherical or ellipsoidial forms This method of deposition would, in some cases, easily account for the presence of much of the pyrites as formed by chemical actions of organic matter, which is partially seen in many coal seams, but accounts perfectly for the variations in the contents of these pyrites masses in respect of copper, &c., as well as their poorness in this, and hardness at their extremities in length and depth, and their thinning out in these directions as well. While their present appearances, especially those masses showing great width at the surface, are, on examining their position, proofs of excessive denudation having washed away the half or more than these, and leaving cuneiform portions with the maximum lengths of their horizontal axis, or less as above or below this central division of such basin-like casts, while the thicker and shorter masses indicate as if they were casts of deeper pools, and have had their transverse axis at right angles to the axis of elevation, giving the strike to both hypogene and sedimentary rocks, and hence deeper but always thinning out in this as well as the other directions. In the flatter masses, little denudated on the outcrops, these elliptic forms for the perimeters, and ellipsodial segments forms solids, are fully evident, while the same together with the cuneiform shapes of those tilted in unusual directions as at Cruzadilla, are equally good evidences of the interstratification origin of these masses of cupreous pyrites.

Origin of oxidated portions of outcrops, and origin of tobas.—Before going further it will be well to say a few words on the origin of the oxidated portion of these masses, and forming what we designate as the outcrops of the same, as well as the origin of the ferruginous conglomerates, called tobas, that exist in their vicinity.

It has been already noted that the oxidation of these outcrops is owing to exposure to atmospheric agencies owing to their elevation, and that this state of oxidation reaches a depth, corresponding to the possible leaching levels in their vicinity It may also be remarked that the masses of iron ores of the Province of Sevilla, which are generally found forming the crests of high hills there, also carry in depth some sulphur and copper below the levels that can leach them, and there is every reason to suppose that the whole of these masses now good hematite and suitable for the manufacture of iron, is best in the highest and most exposed portions above this level of leaching, and the whole may have been both cupreous and pyritic when originally elevated in remote geological ages. Now, some of the caps of the cupreous pyrites here are good hematites also, Rio Tinto, and Confesionarios, Val de la Musa being important examples, while all the masses have oxides of iron that could be utilised as iron ores, but the expenses incident to their classification owing to the large masses of impure classes that have in time got mixed with them, prevent at present values for iron, any movement in this direction.

(*To be continued.*)

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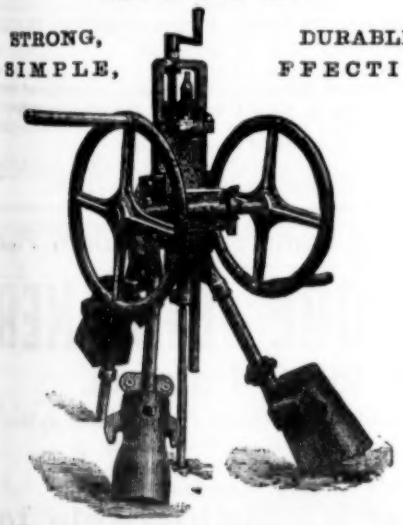

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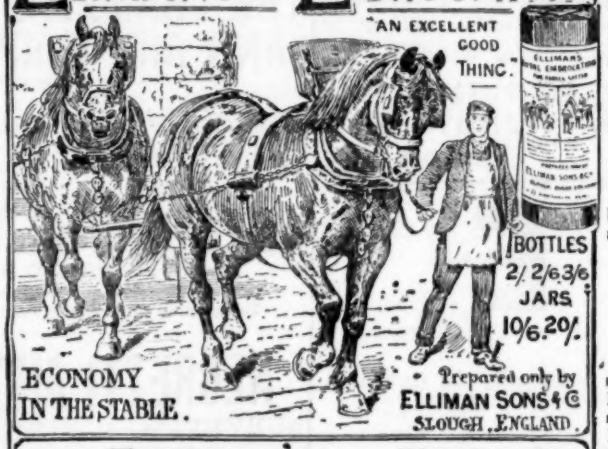
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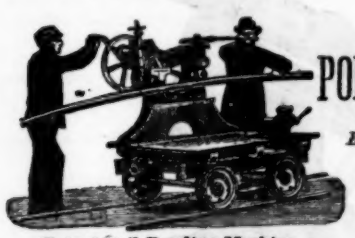

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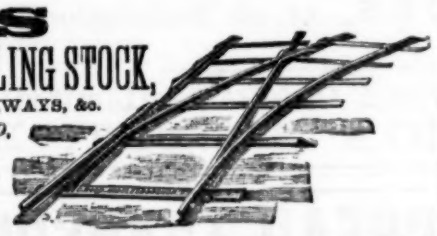

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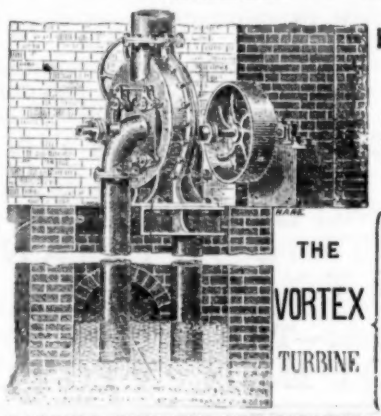

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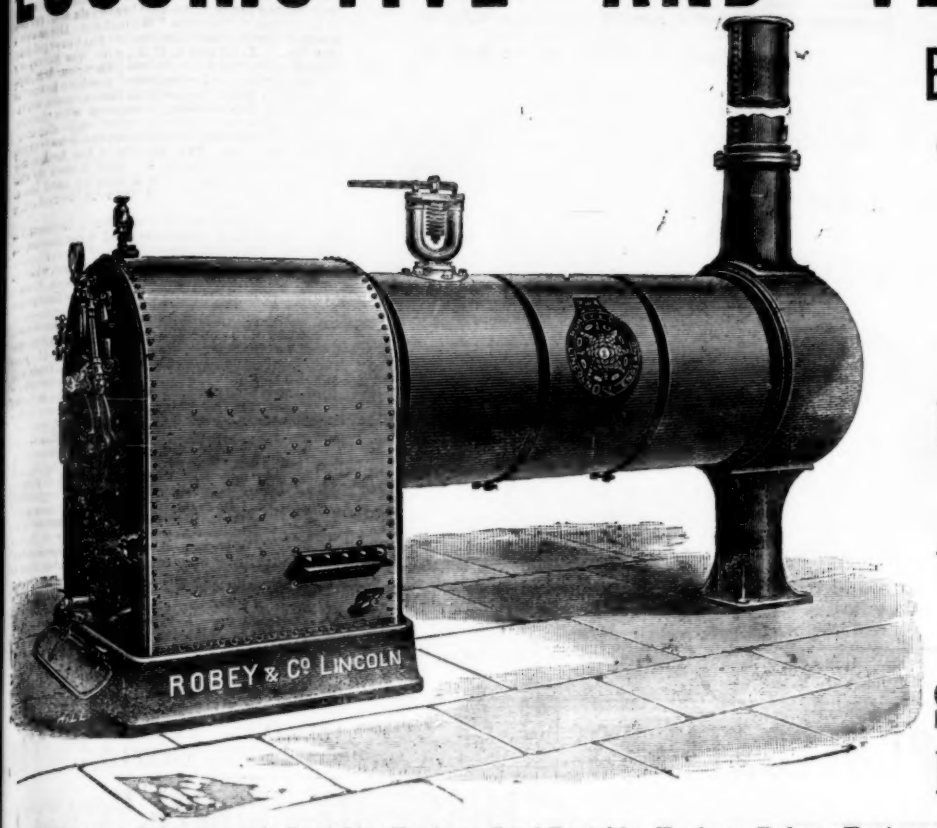

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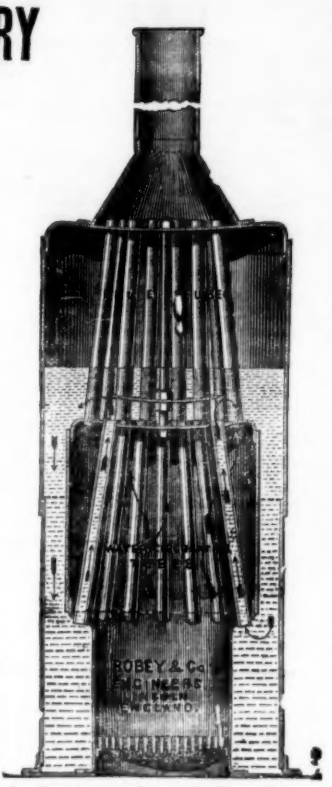

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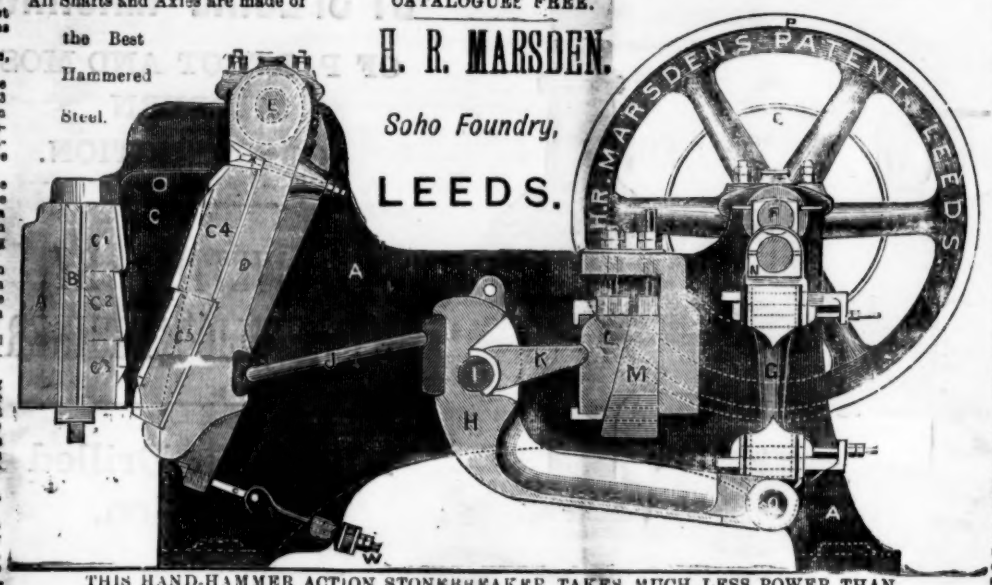

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